Department of Finance Canada
Ministère des Finances Canada

2016–2017

# Debt Management Report

Canada

*Cette publication est également disponible en français.*

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# Foreword by the Minister of Finance

The Government of Canada is making investments that are creating jobs, growing the economy, and providing more opportunities for the middle class and those working hard to join it. As the pace of change accelerates, and the global economy transforms, Canada must keep its sights set on the future and provide families with the tools, opportunities and confidence to succeed. An important element of that is the Government of Canada's debt management strategy.

The fundamental objective of our debt management strategy is to raise stable and low-cost funding that allows the Government to make the necessary investments that put people first and ensure that Canadians have access to the good, well-paying jobs of tomorrow. An associated objective is to maintain a well-functioning market in Government of Canada securities, which helps to keep debt costs low and stable and is generally to the benefit of all Canadians.

In support of these objectives, I am pleased to table before Parliament the Government of Canada's *Debt Management Report* for fiscal year 2016–17. The design and implementation of the domestic debt program are guided by the key principles of transparency, regularity, prudence and liquidity, which support a well-functioning government securities market.

Towards this end, the Government publishes strategies and plans, and consults regularly with market participants to ensure the integrity and attractiveness of the market for dealers and investors. The structure of the debt is managed conservatively in a cost-risk framework, preserving access to diversified sources of funding and supporting a broad investor base.

This year's *Debt Management Report* shows that Canada continues to follow a prudent debt management strategy, raising stable and low-cost funding to meet its borrowing requirements.

The Government is committed to sound fiscal management as it continues to make investments to support long-term economic growth and a strong middle class, while preserving Canada's low-debt advantage for current and future generations.

The Honourable Bill Morneau, P.C., M.P.
Minister of Finance
Ottawa, 2017

# Purpose of This Publication

This edition of the *Debt Management Report* provides a detailed account of the Government of Canada's borrowing and debt management activities for the fiscal year ending March 31, 2017.

As required under Part IV (Public Debt) of the *Financial Administration Act*, this publication ensures transparency and accountability regarding these activities. It reports on actual borrowing and uses of funds compared to those forecast in the *Debt Management Strategy for 2016–17*, published on March 22, 2016 as Annex 3 of Budget 2016 (www.budget.gc.ca/2016/docs/plan/budget2016-en.pdf). It also discusses the environment in which the debt was managed, the composition of the debt, changes in the debt during the year, strategic policy initiatives and performance outcomes.

## Other Information

The *Public Accounts of Canada* is tabled annually in Parliament and is available on the Public Services and Procurement Canada website (www.tpsgc-pwgsc.gc.ca). The *Debt Management Strategy* and the *Report on the Management of Canada's Official International Reserves*, which are also tabled annually in Parliament, are available on the Department of Finance Canada website (www.fin.gc.ca). Additionally, monthly updates on cash balances and foreign exchange assets are available through *The Fiscal Monitor,* which is also available on the Department of Finance Canada website.

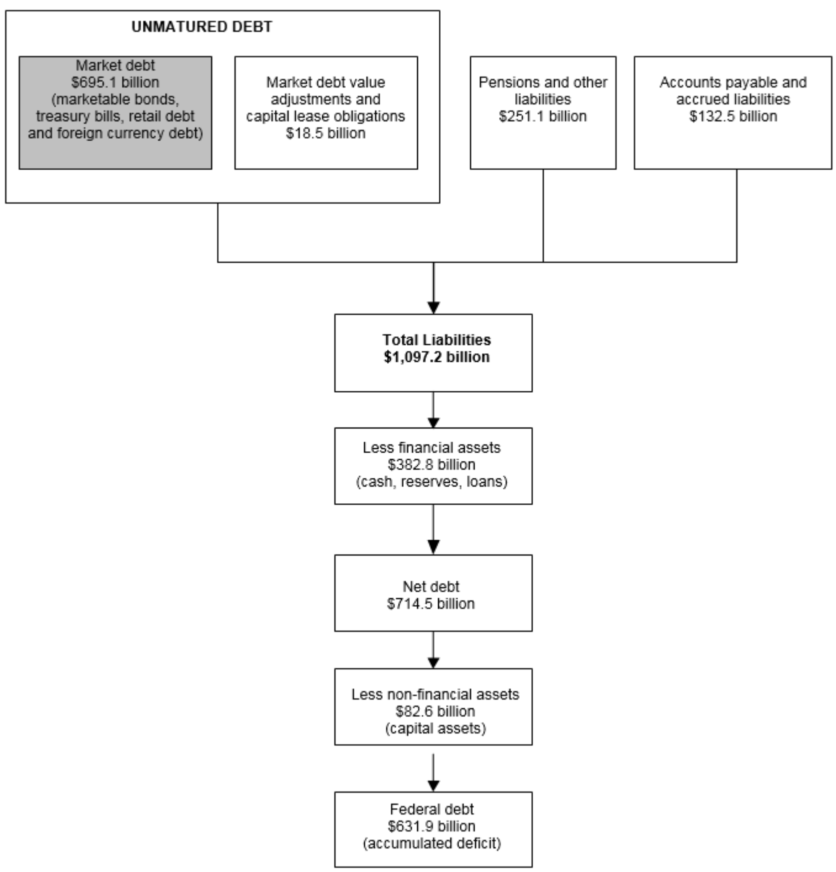
# Executive Summary

## Introduction

This publication reports on two major activities: (i) the management of federal market debt (the portion of the debt that is borrowed in financial markets); and (ii) the investment of cash balances in liquid assets until needed for operations.

The Government's market debt, including marketable bonds, treasury bills, retail debt and foreign currency debt, stood at $695.1 billion at the end of fiscal year 2016–17 (see shaded area of Chart 1). In addition to market and other types of unmatured debt, other liabilities, including pensions and accounts payable, brought the total liabilities of the Government of Canada to $1,097.2 billion at that time. When financial and non-financial assets[1] are subtracted from total liabilities, the federal debt or accumulated deficit of the Government of Canada was $631.9 billion as at March 31, 2017 (see Chart 1).

Chart 1
**Snapshot of the Federal Balance Sheet, as at March 31, 2017**




Note: Numbers may not add due to rounding.
Source: *Public Accounts of Canada*.

[1] Financial assets include cash and cash equivalents; accounts receivable; foreign exchange accounts; loans, investments and advances; and public sector pension assets. Non-financial assets include tangible capital assets, inventories and prepaid expenses.

There are two types of market debt: domestic debt, which is denominated in Canadian dollars, and foreign currency debt. Domestic funding is conducted through the issuance of marketable securities, which consist of nominal bonds, Real Return Bonds and treasury bills, including cash management bills. These securities are sold predominately via auction but occasionally through syndication at the Government's discretion.[2] Cross-currency swaps of domestic obligations and issuance of foreign currency debt are used to fund foreign reserve assets held in the Exchange Fund Account (see the section entitled "Foreign Currency Debt").

# Highlights for 2016–17

## Higher Stock of Market Debt

The stock of market debt increased by $25.4 billion in 2016–17, bringing the total stock to $695.1 billion. The change in the stock was mainly comprised of a $32.2 billion increase in domestic marketable bonds, a $1.4 billion decrease in treasury and cash management bills, a $4.9 billion decrease in foreign currency debt, and a $0.5 billion decrease in retail debt outstanding.

However, despite the increased debt stock, Canada's federal market debt-to-GDP (gross domestic product) ratio remains the lowest among all of the Group of Seven (G7) nations.

## Strong Demand for Government of Canada Debt Securities

In 2016–17, the relative strength of Canadian capital markets continued to promote primary and secondary market demand for Government of Canada securities. Accordingly, treasury bill and bond auctions remained well-covered and competitively bid, providing an efficient manner for the Government to raise funding. Auctions were also predictable and transparent, helping to promote well-functioning markets for the Government's securities, which in turn supported Canada's debt management objectives and is generally to the benefit of a wide array of domestic market participants.

The Government increased overall issuance of nominal bonds and reintroduced the 3-year sector in 2016–17. The 3-year sector was reintroduced as a reopening of older 5-year bonds, and had a strong showing at auctions for all issuances.

Overall, the weighted average rate of interest on market debt reached a historical low of 1.89 per cent, down from 2.03 per cent in 2015–16.

2 In 2016–17, there were regular auctions for 2-, 3-, 5-, 10- and 30-year nominal bonds and Real Return Bonds.

# Part I
# 2016–17 Debt Management Context

## Composition of Federal Debt

Total market debt increased by $25.4 billion (or about 3.8 per cent) to $695.1 billion (see Table 1). For additional information on the financial position of the Government, see the 2016–17 *Annual Financial Report of the Government of Canada* (www.fin.gc.ca/purl/afr-eng.asp).

Table 1
**Change in the Composition of Federal Debt, as at March 31**
$ billions

| | 2017 | 2016 (Restated) | Change |
|---|---|---|---|
| **Payable in Canadian currency** | | | |
| Marketable bonds | 536.3 | 504.1 | 32.2 |
| Treasury and cash management bills | 136.7 | 138.1 | -1.4 |
| Retail debt | 4.5 | 5.1 | -0.5 |
| **Total payable in Canadian currency** | 677.5 | 647.2 | 30.3 |
| **Payable in foreign currencies** | 17.6 | 22.5 | -4.9 |
| **Total market debt** | 695.1 | 669.7 | 25.4 |
| Market debt value adjustment, capital lease obligations and other unmatured debt | 18.5 | 18.5 | 0.0 |
| **Total unmatured debt** | 713.6 | 688.2 | 25.4 |
| Pension and other accounts | 251.1 | 243.5 | 7.6 |
| **Total interest-bearing debt** | 964.7 | 931.7 | 33.0 |
| Accounts payable, accruals and allowances | 132.5 | 127.9 | 4.7 |
| **Gross debt** | 1,097.2 | 1,059.6 | 37.6 |
| Total financial assets | 382.8 | 365.8 | 16.9 |
| Total non-financial assets | 82.6 | 77.8 | 4.8 |
| **Federal debt (accumulated deficit)** | 631.9 | 616.0 | 15.9 |

Note: Numbers may not add due to rounding.
Source: *Public Accounts of Canada.*

# Sources and Uses of Borrowing

The key reference point for debt management is the financial requirement or source, which represents net cash needs or surplus for the fiscal year. This measure differs from the budgetary balance (i.e., the deficit or surplus on an accrual basis) by the amount of non-budgetary transactions, which can be significant. Non-budgetary transactions include changes in federal employee pension accounts; changes in non-financial assets; loans, investments and advances; changes in other financial assets and liabilities; and foreign exchange activities, which do not affect cash needs or surplus. Anticipated borrowing and planned uses of funds are set out in the *Debt Management Strategy*, while actual borrowing and uses of funds compared to those forecast are reported in this publication (see Table 2).

There was a financial requirement of $27.5 billion in 2016–17 as a result of $17.8 billion in cash outflows due to a budgetary deficit and $9.7 billion due to non-budgetary transactions. The financial requirement was approximately $9.5 billion lower than the projection in the *Debt Management Strategy for 2016–17*. This compares to a financial requirement of $19.5 billion in 2015–16.

Authority to borrow in financial markets is provided by Part IV of the *Financial Administration Act*, which authorizes the Minister of Finance to issue securities and undertake related activities, including entering into financial contracts and derivatives transactions. On the recommendation of the Minister of Finance, the Governor in Council approved an aggregate borrowing limit of $325 billion for 2016–17.[3]

As part of Budget 2016, amendments to the *Financial Administration Act* were introduced to repeal the general power of the Governor in Council to authorize the Government's borrowings. Budget 2017 introduced the *Borrowing Authority Act* through which Parliament approved a maximum limit on the Government's borrowings, including those of agent Crown corporations. Work is underway to bring this new borrowing authority framework into force.

Total actual borrowings in 2016–17 were $276 billion, $49 billion below the authorized borrowing authority limit and $2 billion lower than the plan set out in the *Debt Management Strategy for 2016–17* (Table 2).

In 2016–17, loans to the Business Development Bank of Canada, Canada Mortgage and Housing Corporation and Farm Credit Canada under the Crown Borrowing Program were $0.3 billion lower than the planned $4 billion. Since the inception of the program in 2007–08, the consolidated borrowings of these Crown corporations have grown to account for $52 billion of federal market debt.

3 Approved Orders in Council (OIC) are available on the Privy Council Office website (www.pco-bcp.gc.ca/oic-ddc.asp?lang=eng&page=secretariats). The reference number for the 2016–17 OIC is 2016-0169.

Table 2

**Planned/Actual Sources and Uses of Borrowings, Fiscal Year 2016–17**

$ billions

| | Planned[1] | Actual | Difference |
|---|---|---|---|
| **Sources of borrowings** | | | |
| Payable in Canadian currency | | | |
| Treasury bills[2] | 134 | 137 | 3 |
| Bonds[2] | 133 | 133 | 0 |
| Retail debt[2] | 1 | 2 | 1 |
| Total payable in Canadian currency | 268 | 272 | 4 |
| Payable in foreign currencies | 10 | 4 | -6 |
| Total cash raised through borrowing activities | 278 | 276 | -2 |
| **Uses of borrowings[3]** | | | |
| Refinancing needs | | | |
| Payable in Canadian currency | | | |
| Treasury bills | 136 | 138 | 2 |
| Bonds | 92 | 103 | 11 |
| Of which: | | | |
| Regular bond buybacks | 0.8 | 1.0 | 0 |
| Cash management bond buybacks | 23 | 33 | 10 |
| Retail debt | 2 | 2 | 0 |
| Total payable in Canadian currency | 231 | 243 | 12 |
| Payable in foreign currencies | 10 | 9 | -1 |
| Total refinancing needs | 241 | 252 | 11 |
| **Financial source/requirement** | | | |
| Budgetary balance | 29 | 18 | -11 |
| Non-budgetary transactions | | | |
| Pension and other accounts | -2 | -7 | -5 |
| Non-financial assets | 2 | 5 | 3 |
| Loans, investments and advances | 5 | 6 | 1 |
| Of which: | | | |
| Loans to enterprise Crown corporations | 4 | 4 | 0 |
| Other | 1 | 2 | 1 |
| Other transactions[4] | 3 | 6 | 3 |
| Total non-budgetary transactions | 8 | 10 | 2 |
| **Total financial source/requirement** | 37 | 28 | -9 |
| Total uses of borrowings | 278 | 280 | 2 |
| Change in other unmatured debt transactions[5] | 0 | 19 | 19 |
| Net increase or decrease (-) in cash | 0 | -2 | -2 |

Note: Numbers may not add due to rounding.

1 Planned numbers are from Budget 2017 and the *Debt Management Strategy for 2017–18*.

2 Issuance figures are at par value.

3 A negative sign denotes a financial source.

4 Primarily includes the conversion of accrual adjustments into cash, such as tax and other account receivables; provincial and territorial tax collection agreements; and tax payables and other liabilities.

5 Includes cross-currency swap revaluation, unamortized discounts on debt issues, obligations related to capital leases and other unmatured debt.

# Government of Canada Credit Rating Profile

The Government of Canada continued to receive the highest possible credit ratings, with a stable outlook, on Canadian-dollar and foreign-currency-denominated short- and long-term debt from the five rating agencies that evaluate Canada's debt (see Table 3).

Rating agencies indicated that Canada's effective, stable and predictable policymaking and political institutions, economic resilience and diversity, well-regulated financial markets, and the strength of monetary and fiscal flexibility supported the country's ongoing triple-A credit rating. The rating agencies indicated that Canada's debt position would remain favourable, which provides investors of Canadian debt with a sense of security.

Table 3
**Government of Canada Credit Ratings**

| Rating agency | Term | Domestic currency | Foreign currency | Outlook | Last rating action |
|---|---|---|---|---|---|
| Moody's Investors Service | Long-term | Aaa | Aaa | Stable | May 2002 |
| | Short-term | P-1 | P-1 | | |
| Standard & Poor's | Long-term | AAA | AAA | Stable | July 2002 |
| | Short-term | A-1+ | A-1+ | | |
| Fitch Ratings | Long-term | AAA | AAA | Stable | August 2004 |
| | Short-term | F1+ | F1+ | | |
| Dominion Bond Rating Service | Long-term | AAA | AAA | Stable | n/a |
| | Short-term | R-1 (High) | R-1 (High) | | |
| Japan Credit Rating Agency | Long-term | AAA | AAA | Stable | n/a |

# Part II
# Report on Objectives and Principles

## Objectives and Principles

The fundamental objective of debt management is to raise stable and low-cost funding to meet the needs of the Government of Canada. An associated objective is to maintain a well-functioning market in Government of Canada securities, which helps to keep debt costs low and stable and is generally to the benefit of a wide array of domestic market participants and to the broader Canadian capital markets.

In support of these objectives, the design and implementation of the domestic debt program are guided by the key principles of transparency, regularity, prudence and liquidity, which support a well-functioning government securities market. Towards this end, the Government publishes strategies and plans, and consults regularly with market participants to ensure the integrity and attractiveness of the market for dealers and investors. The structure of the debt is managed conservatively in a cost-risk framework, preserving access to diversified sources of funding and supporting a broad investor base.

## Raising Stable, Low-Cost Funding

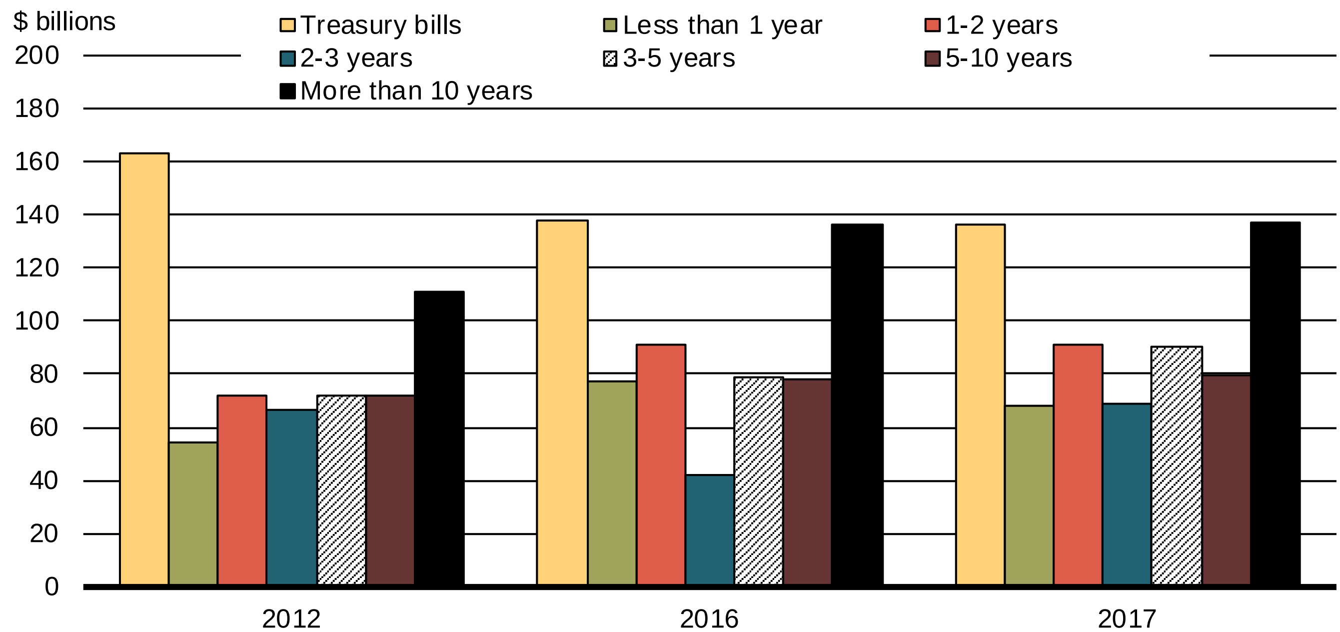
In general, achieving stable, low-cost funding involves striking a balance between debt costs and various risks in the debt structure. This selected balance between cost and risk, or preferred debt structure, is mostly achieved through the deliberate allocation of issuance between various debt instruments.

### Composition of Market Debt

The composition of the stock of market debt is a reflection of past debt issuance choices. The effects of changes in the issuance patterns of short-term instruments become visible relatively quickly, while the full effect of issuance changes in longer-term maturities will take their full maturity periods to be fully appreciated. A well-distributed maturity profile ensures a controlled exposure to changes in interest rates over time and provides liquidity across different maturity sectors.

In 2016–17, the composition of market debt by remaining term to maturity continued to shift to a more even distribution, which helps to reduce exposure to debt rollover risk. As projected in the *Debt Management Strategy for 2016–17*, the Government increased issuance in all nominal bond sectors, with an increased focus on the issuance of short- and medium-term bonds. One reason for this shift was the reintroduction of the 3-year bond sector after its discontinuation in 2015. Consequently, the stock of debt with remaining terms to maturity between two and five years increased significantly while the stock of treasury bills and bonds with remaining terms to maturity greater than five years stayed relatively constant (see Chart 2).

Chart 2
**Composition of Market Debt by Remaining Term to Maturity, as at March 31**



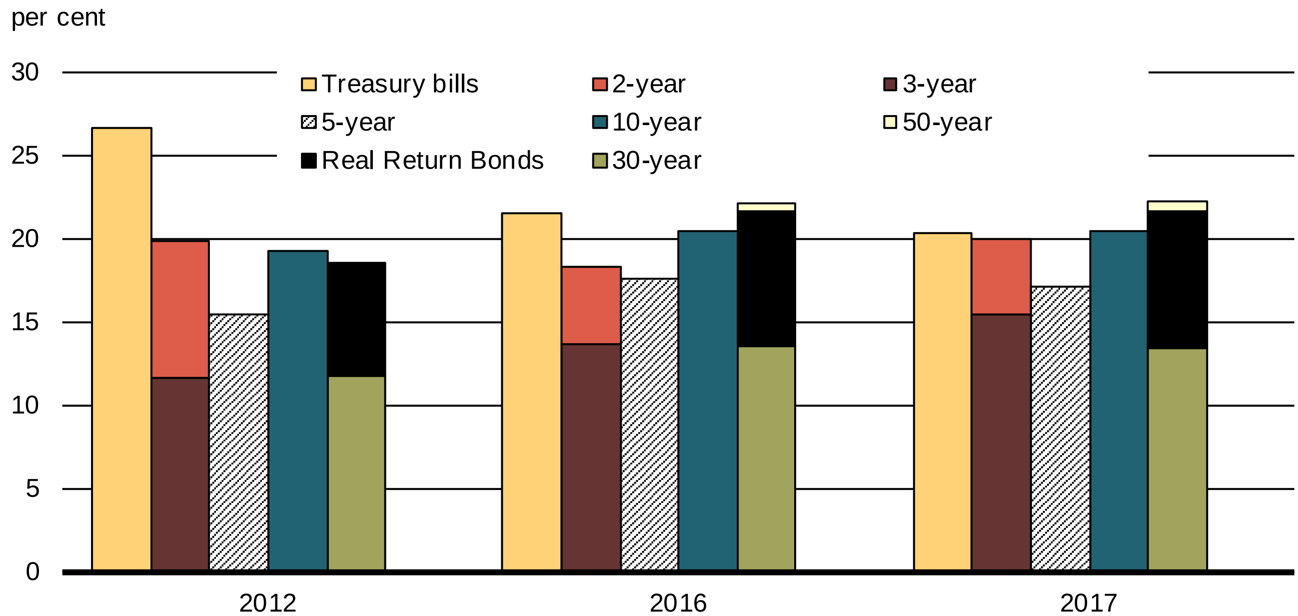

Data includes Consumer Price Index adjustment
Source: Public Accounts of Canada and Bank of Canada

## Medium-Term Debt Structure

The Government's medium-term debt strategy is informed by modelling analysis that reflects a wide range of economic and interest rate scenarios drawn from historical experience. As noted above, the medium-term debt strategy is aimed at gradually transitioning the debt structure towards a more even distribution, which improves its cost-risk characteristics.

In 2016–17, the Government increased overall issuance of nominal bonds and reintroduced the 3-year sector. As a result, the share of bonds with original terms to maturity of 2 to 5 years increased by 1.2 percentage points to 37.1 per cent of the stock of market debt outstanding (see Chart 3).

Chart 3
**Composition of Market Debt by Original Terms of Issuance, as at March 31**



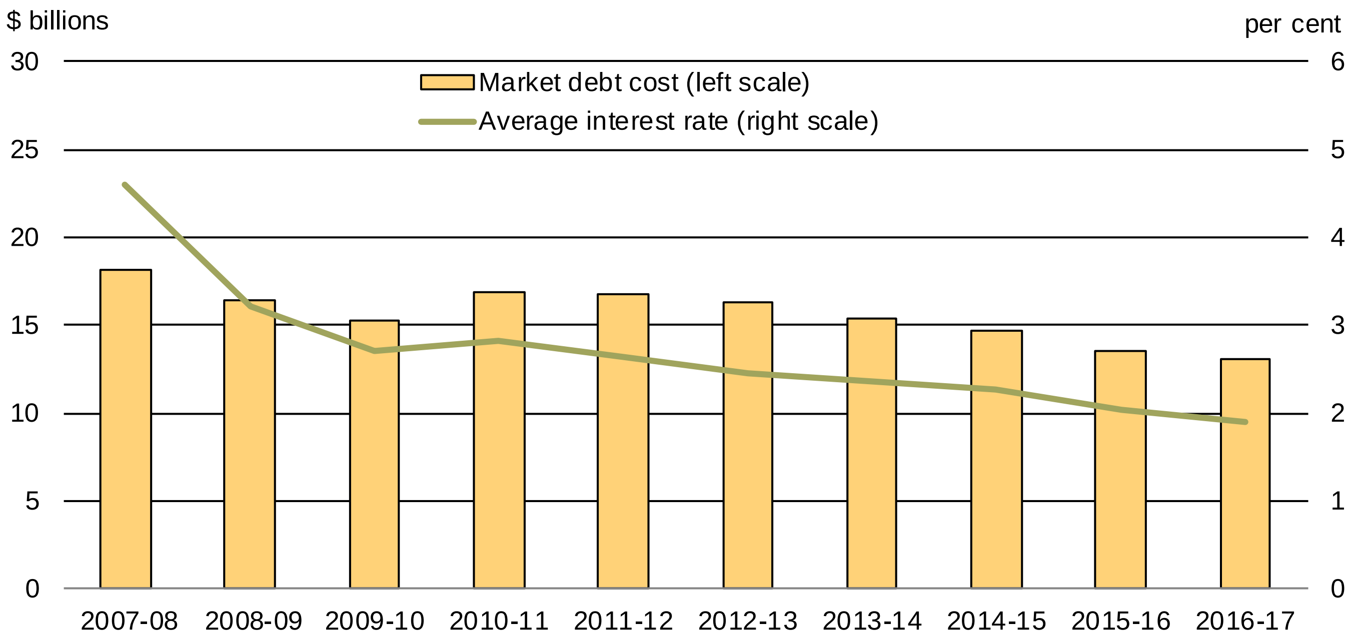

Source: Bank of Canada

## Cost of Market Debt

Market debt costs are the largest component of public debt charges (public debt charges also include interest expenses on non-market liabilities).[4] The weighted average rate of interest on outstanding market debt was 1.89 per cent in 2016–17, down from 2.03 per cent in 2015–16. As a result, the interest rate cost of market debt decreased from $13.6 billion in 2015–16 to a new 10-year low of $13.1 billion in 2016–17, reflecting the lower weighted average rate of interest on market debt and a relatively stable stock of market debt (see Chart 4).

Chart 4

**Market Debt Costs and Average Effective Interest Rate**



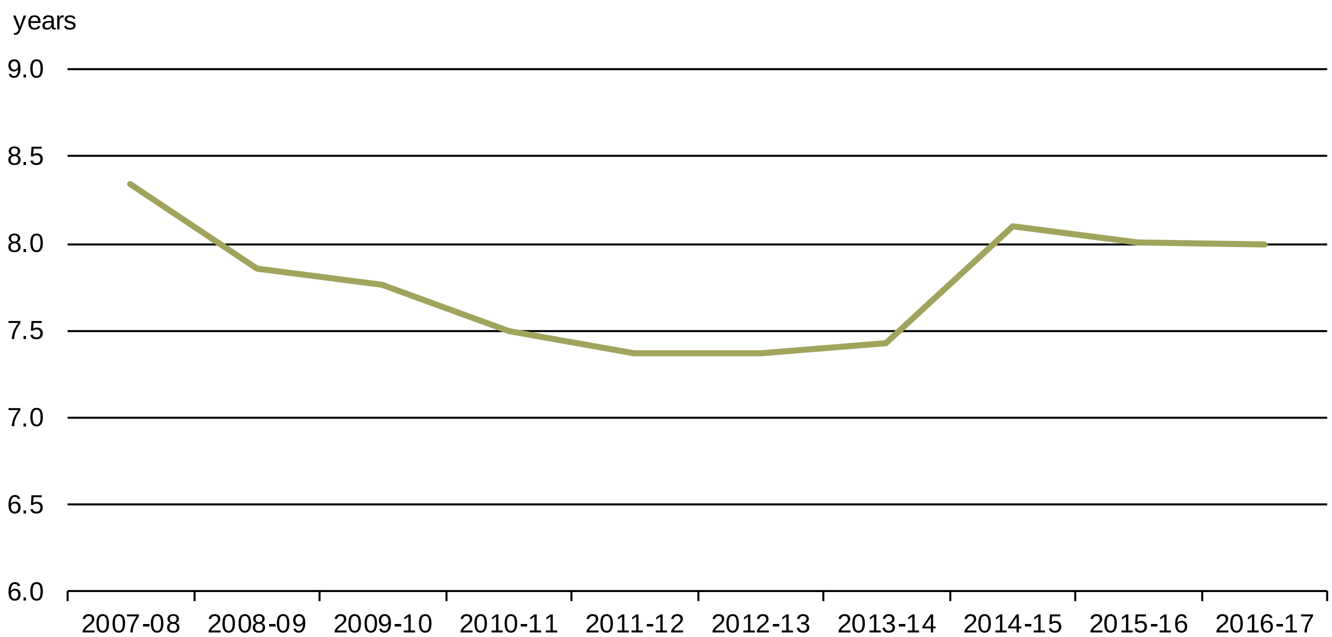

Source: Public Accounts of Canada

[4] Non-market liabilities include pensions, other employee and veteran future benefits, and other liabilities.

## Average Term to Maturity and Refixing Share of Market Debt, Net of Financial Assets

The average term to maturity (ATM) of market debt (net of financial assets) declined between 2007–08 and 2011–12, primarily due to a large increase in the issuance of treasury bills and 2-, 3- and 5-year bonds relative to longer-term bonds following the financial crisis of 2008–2009. In 2014–15, as the Canadian and global financial markets recovered from the crisis, the ATM increased to 8.1 years. Since then, the ATM has remained broadly unchanged and stood at 8.0 in 2016–17 (see Chart 5).

Chart 5
**Average Term to Maturity of Government of Canada Market Debt, Net of Financial Assets**



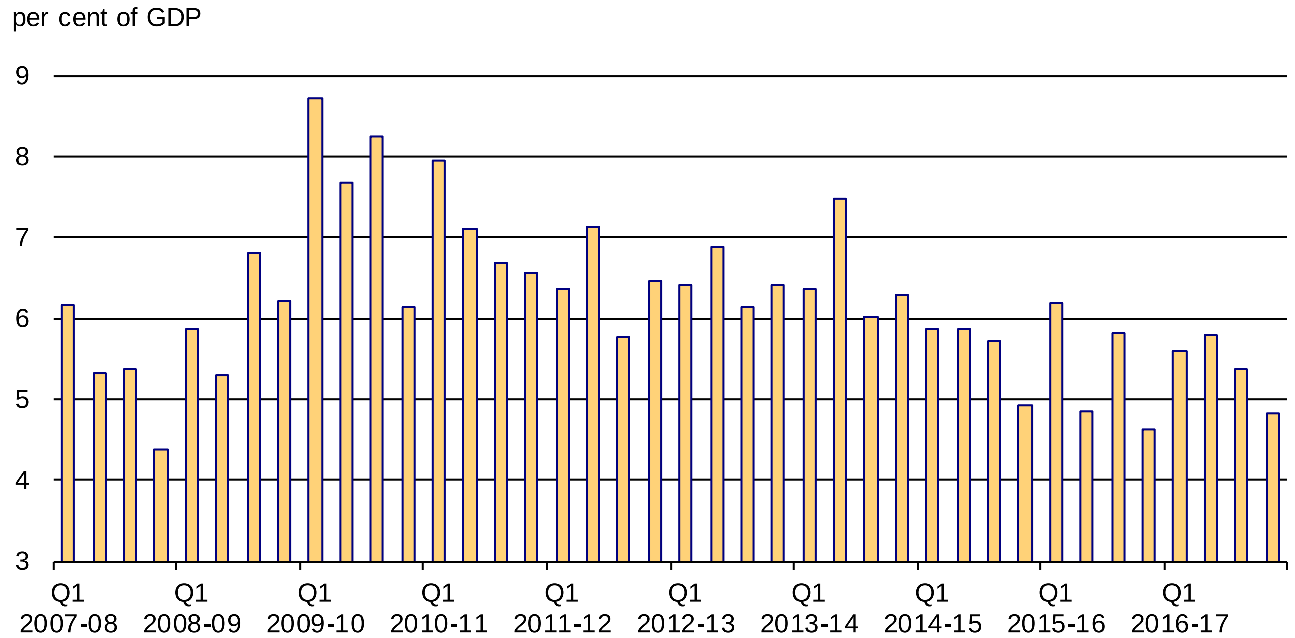
Source: Bank of Canada

**Maintaining debt rollover within acceptable parameters:** Prudent management of debt refinancing needs promotes investor confidence and strives to minimize the impact of market volatility or disruptions on the funding program.

The amount of debt maturing per quarter as a percentage of GDP rose to an average of 7.7 per cent during 2009–10 due to an increased stock of treasury bills, but it has since declined to an average of 5.4 per cent in 2016–17 (see Chart 6).

Chart 6

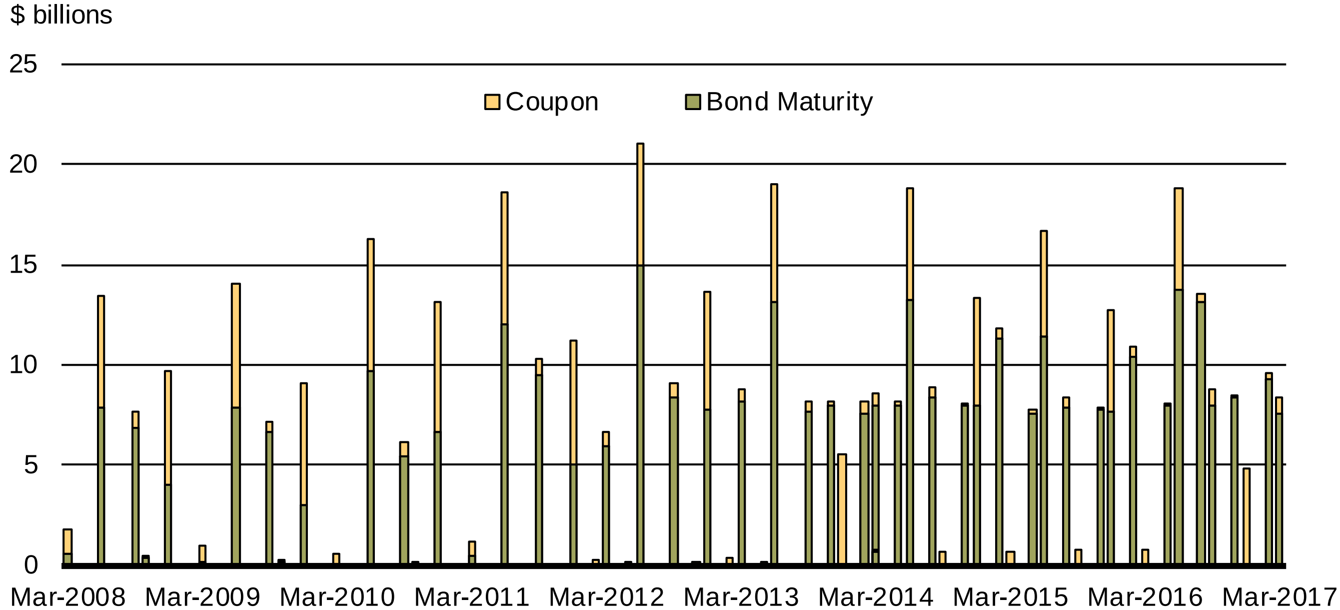
**Quarterly Maturities of Domestic Market Debt as a percentage of GDP**




Source: Bank of Canada

Single-day cash flow maturities had increased as a result of higher debt issuance since the financial crisis of 2008–2009, but have been generally trending downwards since 2012 as a result of the introduction of four new maturity dates—February 1, May 1, August 1 and November 1—in 2011–12 (see Chart 7). The four additional maturity dates have allowed the debt program to absorb increases in funding requirements and have helped smooth the cash flow profile of upcoming maturities over the medium term. Most large single-day maturity dates are now due to principal and coupon payments on bonds that were issued prior to 2011–12; the smoothing effect of these additional maturity dates on the cash profile will become even more apparent over time.

Chart 7
**Single-Day Bond Maturities Plus Coupon Payments, Net of Buyback Operations**




Source: Bank of Canada

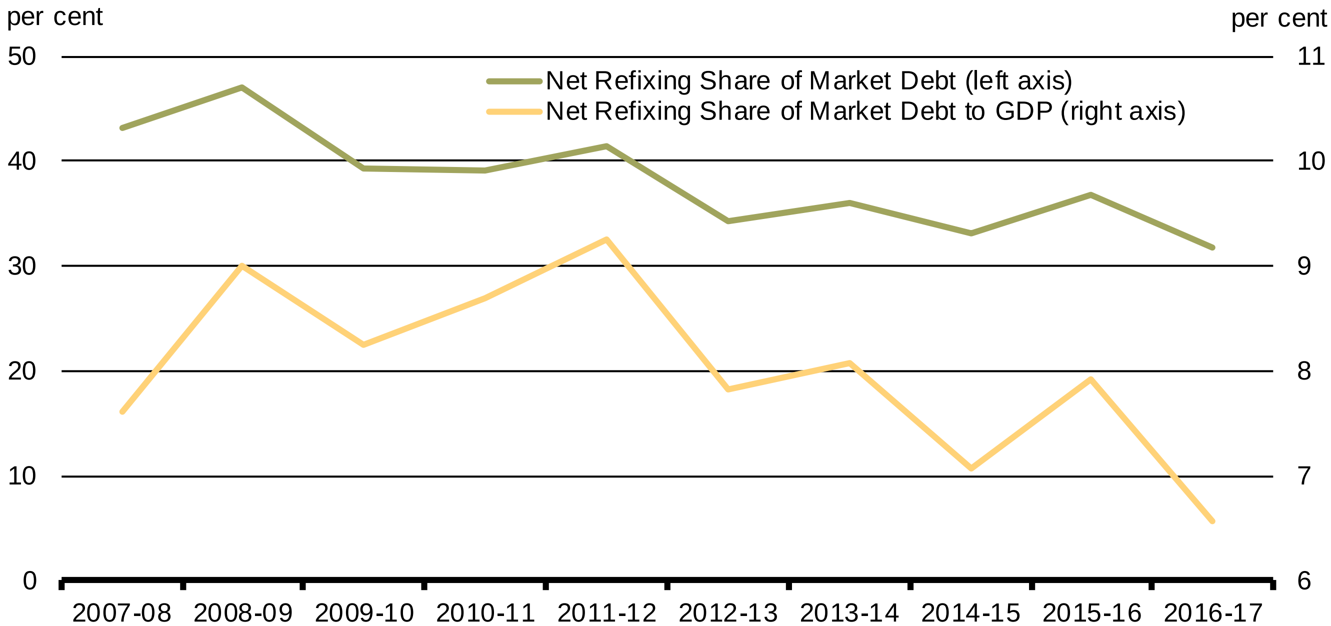
The benchmark maturity date profile is as follows:

- 2-year sector: February 1, May 1, August 1, November 1
- 3-year sector: March 1, September 1
- 5-year sector: March 1, September 1
- 10-year sector: June 1
- 30-year sector: December 1, alternating years with Real Return Bond maturities

The refixing share of market debt (net of financial assets) measures the proportion of all market debt that matures or needs to be repriced within one year. The refixing share net of assets is used rather than the gross refixing share because the net-of-assets measure better reflects the risk exposure to the Government. In 2016–17, the net refixing share of market debt decreased by 5.0 percentage points to 31.8 per cent (see Chart 8). The net refixing share of market debt to GDP measures the amount of market debt that matures or needs to be repriced within one year relative to nominal GDP for that year. The net refixing share of market debt to GDP decreased to 6.6 per cent in 2016–17, down 1.3 percentage points from 2015–16.

Chart 8

**Net Refixing Share of Market Debt and Market Debt to GDP**




Source: Bank of Canada

# Maintaining a Well-Functioning Government Securities Market

A well-functioning wholesale market in Government of Canada securities is important as it benefits the Government as a borrower as well as a wide range of market participants. For the Government as a debt issuer, a well-functioning market attracts investors, contributes to keeping funding costs low and stable over time, and provides flexibility to meet changing financial requirements. For market participants, a liquid and transparent secondary market in government debt provides risk-free assets for investment portfolios, a pricing benchmark for other debt issues and derivatives, and a useful tool for hedging interest rate risk. The following actions promoted a well-functioning Government of Canada securities market in 2016–17.

**Providing regular and transparent issuance:** The Government of Canada conducted treasury bill auctions on a bi-weekly basis, announced the bond auction schedule prior to the start of each quarter and provided details for each operation in a Call For Tenders in the week leading up to the auction.[5] In 2016–17, there were regular auctions for 2-, 3-, 5-, 10- and 30-year nominal and Real Return Bonds. Regular and pre-announced issuance provided certainty for dealers and investors, allowing them to plan their investment activities, and supported participation and competitive bidding at auctions. Bond issuance schedules were communicated through the Bank of Canada website on a timely basis.

[5] See the Bank of Canada website (www.bankofcanada.ca/stats/cars/f/bd_auction_schedule.html).

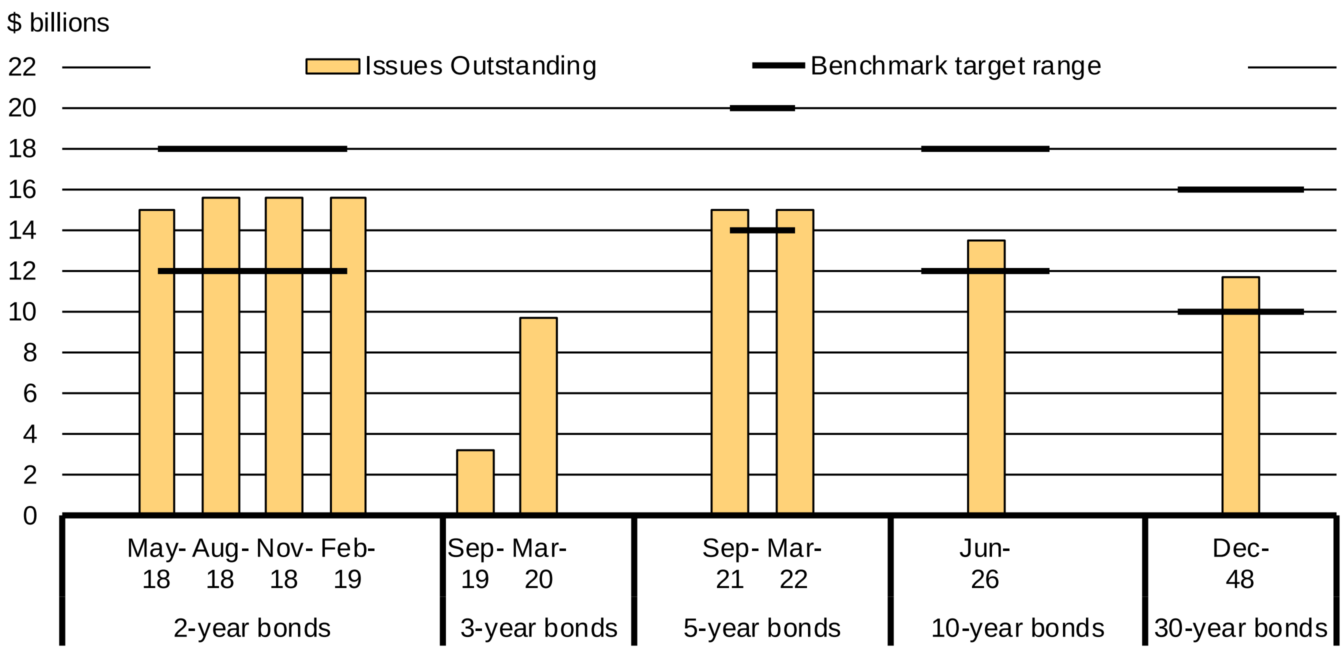
**Concentrating on key benchmarks:** Benchmark target range sizes were increased in the 2-, 5- and 10-year sectors in 2016–17 to support the well-functioning of these important markets, while benchmark target range sizes in the 30-year and Real Return Bond sectors were maintained at the same level compared to the previous year. In addition, the 3-year sector was reintroduced as a reopening of older 5-year bonds:

- 2-year sector: $12 billion to $18 billion
- 3-year sector: $10 billion to $16 billion
- 5-year sector: $14 billion to $20 billion
- 10-year sector: $12 billion to $18 billion
- 30-year nominal sector: $10 billion to $16 billion
- 30-year Real Return Bond sector: $10 billion to $16 billion

The Government of Canada also issues ultra-long-term debt on a tactical basis, with the aim of locking in low financing rates and reducing refinancing risk. As of March 31, 2017, the total outstanding amount of ultra-long-term debt is $3.5 billion.

All benchmark bonds in 2016–17 continued to reach or exceed minimum benchmark size targets (see Chart 9).[6]

Chart 9
**Size of Gross Bond Benchmarks in 2016-2017**




Source: Bank of Canada

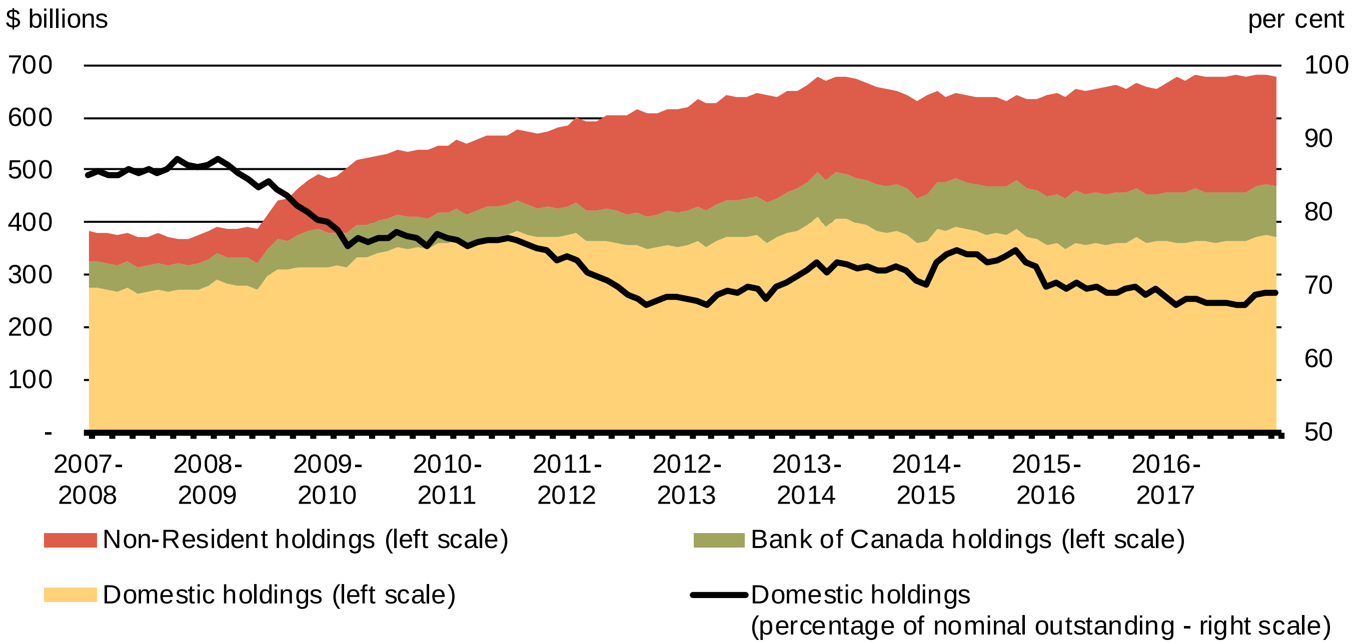
Notes: The outstanding amount for 2- and 10-year bonds reflects the amount following their final reopening, not when they became the benchmark for the respective sectors. 3-year bonds are reopenings of older 5-year bonds. Due to the fungible nature of the 3-year bonds and the older 5-year bonds, gross benchmarks are less applicable as a standard of measure.

[6] Non-fungible securities do not share the same maturity dates with outstanding bond issues. The benchmark size for bonds that are fungible with existing bonds is deemed attained once the total amount of outstanding bonds for that maturity exceeds the minimum benchmark size.

**Ensuring a broad investor base in Government of Canada securities:** A diversified investor base supports an active secondary market for Government of Canada securities, thereby helping to keep funding costs low and stable. Diversification of the investor base is pursued by maintaining a domestic debt program that issues securities in a wide range of maturity sectors, which meet the needs of many different types of investors.

As at March 31, 2017, domestic investors (including the Bank of Canada) held about 69 per cent of Government of Canada securities (see Chart 10). Among domestic investors, insurance companies and pension funds held the largest share of Government of Canada securities (29.2 per cent), followed by financial institutions (23.9 per cent) and the Bank of Canada (14.0 per cent). Taken together, the top three categories accounted for over two thirds of outstanding Government of Canada securities.

Chart 10
**Distribution of Government of Canada Securities**

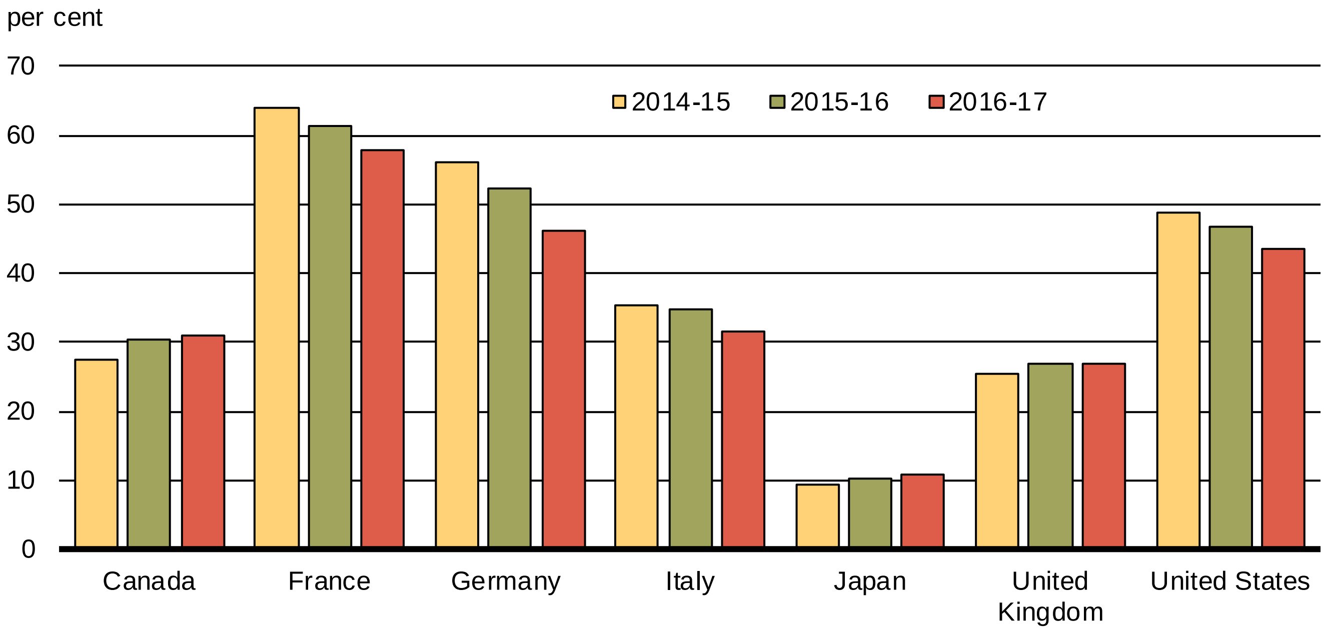



Source: Statistics Canada

The Bank of Canada announced in February 2017 that it will decrease its minimum purchase amount of nominal bonds at auctions from 15 per cent to 14 per cent. This is the first adjustment since September 2015 when the bank decreased its minimum purchase amount from 20 per cent to 15 per cent. This change is for balance-sheet purposes only and has no implications for monetary policy. As a result of this change, the liquidity of Government of Canada securities has improved. For more information, consult the press release at www.bankofcanada.ca/2017/02/bank-canada-announces-reduction-minimum-amount-government/.

Non-resident investors held 31 per cent of Government of Canada marketable securities,[7] up about half a percentage point from 2015–16. This level of non-resident holdings of Government of Canada debt remains in the mid to low range compared to other sovereigns in the G7 (see Chart 11).

Chart 11
**Percentage of Total Marketable Debt of G7 Countries Held by Non-Residents**




Source: Statistics Canada, L'Agence France Trésor, Bundesbank, Bancaimi (Italy Central Bank), Ministry of Finance Japan, United Kingdom Debt Management Office, United States Department of Treasury

**Consulting with market participants:** Formal consultations with market participants are held at least once a year in order to obtain their views on the design of the borrowing program and on the liquidity and efficiency of the Government of Canada securities markets. In November 2015, the Bank of Canada and the Department of Finance Canada held 24 bilateral meetings with market participants. The 2016–17 consultations sought the views of market participants on the functioning of Government of Canada treasury bill and bond markets, and on the key elements of well-functioning Government of Canada securities markets.

In general, market participants reported that Government of Canada securities markets continued to function well, with strong demand across the yield curve. That said, market participants noted that liquidity in Government of Canada securities has declined compared to previous years, and that a bond program with large liquid benchmarks that are relatively consistent across key sectors and maturity dates could help promote liquidity and market well-functioning. More details on the subjects of discussion and views expressed during the 2016–17 debt management strategy consultations are available on the Bank of Canada website.[8]

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7 Data on foreign holdings of both Canadian-dollar-denominated and foreign currency instruments issued by the Government of Canada is collected by Statistics Canada from the Bank of Canada on new issues and through monthly and quarterly questionnaires of market participants on cross-border transactions.

8 See www.bankofcanada.ca/wp-content/uploads/2016/09/debt-management-strategy-consultations-2016-17.pdf.

**Maintaining a well-functioning securities distribution system:** As the Government's fiscal agent, the Bank of Canada distributes Government of Canada marketable bills and bonds by auction to government securities distributors (GSDs) and customers. GSDs that maintain a certain threshold of activity in the primary and secondary market for Government of Canada securities may become primary dealers, which form the core group of distributors for Government of Canada securities. To maintain a well-functioning securities distribution system, government securities auctions are monitored to ensure that GSDs abide by the terms and conditions.[9]

Quick turnaround times enhance the efficiency of the auction and buyback process, and encourage participation by reducing market risk for participants. In 2016–17, the turnaround time for treasury bill and bond auctions averaged 2 minutes 2 seconds, while buyback operations averaged 2 minutes 31 seconds. The average turnaround times in 2015–16 were 2 minutes 5 seconds and 2 minutes 15 seconds, respectively.[10]

**Monitoring secondary market trading in Government of Canada securities:** The two conventional measures of liquidity and efficiency in the secondary market for Government of Canada securities are trading volume and turnover ratio.

Trading volume represents the amount of securities traded during a specific period (e.g., daily). Large trading volumes typically allow participants to buy or sell in the marketplace without a substantial impact on the price of the securities and generally imply lower bid-offer spreads.

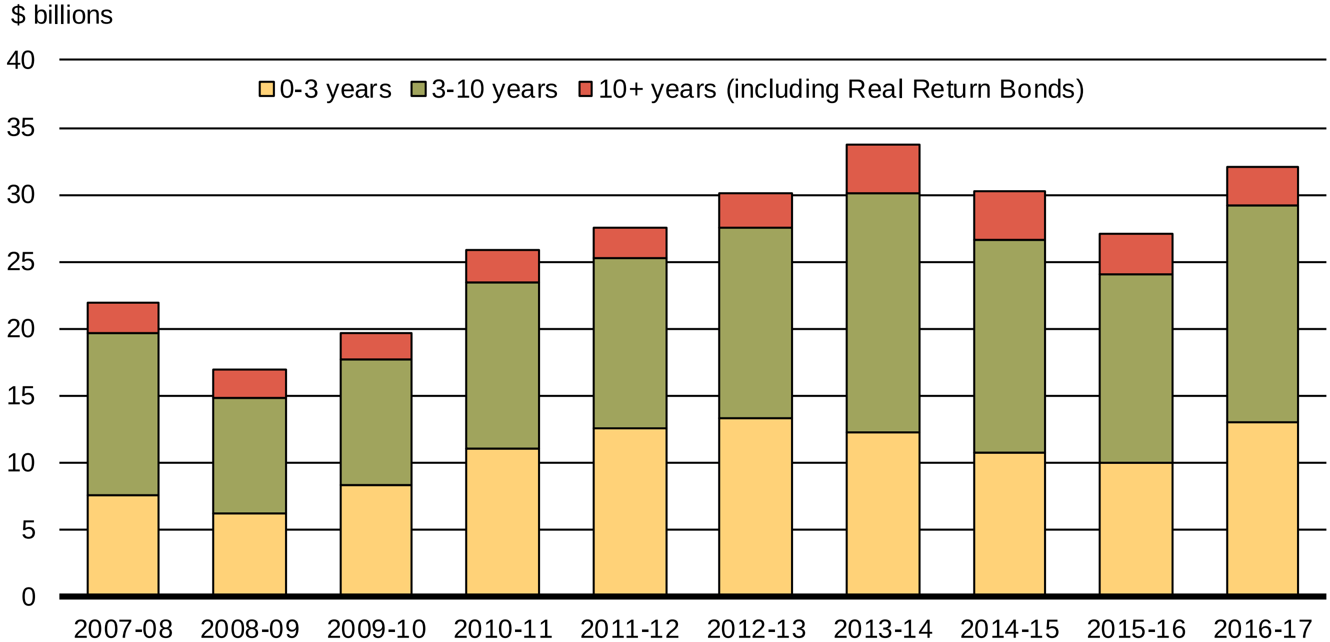
Turnover ratio, which is the ratio of securities traded relative to the amount of securities outstanding, measures market depth. High turnover implies that a large amount of securities changes hands over a given period of time.

9 See the Bank of Canada website (www.bankofcanada.ca/markets/government-securities-auctions/).

10 The turnaround time is the time taken between the submission of a bid and the return of the complete output to the auction participant. The Bank of Canada targets an average turnaround time of less than 3 minutes for auctions and less than 5 minutes for buyback operations. Maximum turnaround times are 5 minutes for auctions and 10 minutes for buyback operations.

The average daily trading volume in the secondary market for Government of Canada bonds during 2016–17 was $32.0 billion, an increase of $4.9 billion from 2015–16 (see Chart 12).

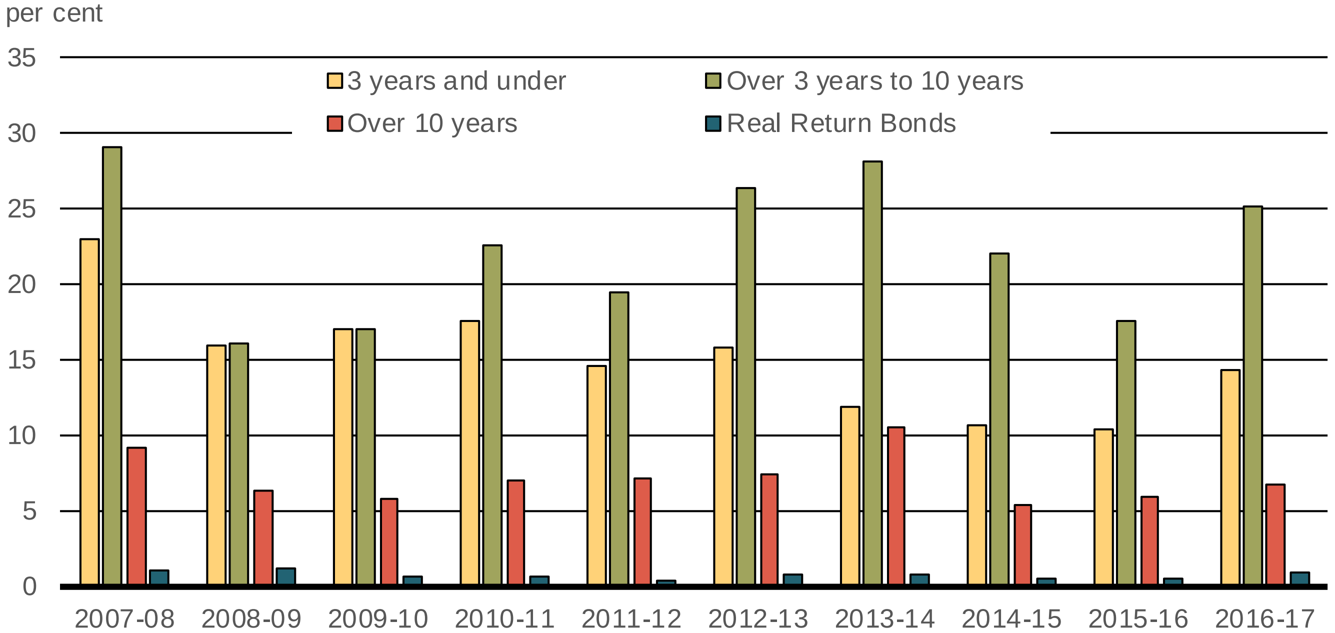
Chart 12
**Government of Canada Bond Average Daily Trading Volumes**




Source: Bank of Canada

The annual debt stock turnover ratio in the Government of Canada secondary bond market was 15.9 per cent in 2016–17, an increase of 1.3 percentage points from 2015–16. The sector with the highest turnover was medium-term bonds with maturities of over 3 years to 10 years at 25 per cent, while Real Return Bonds had the lowest turnover at 1 per cent (see Chart 13).

Chart 13
**Government of Canada Bond Turnover Ratio by Term to Maturity**



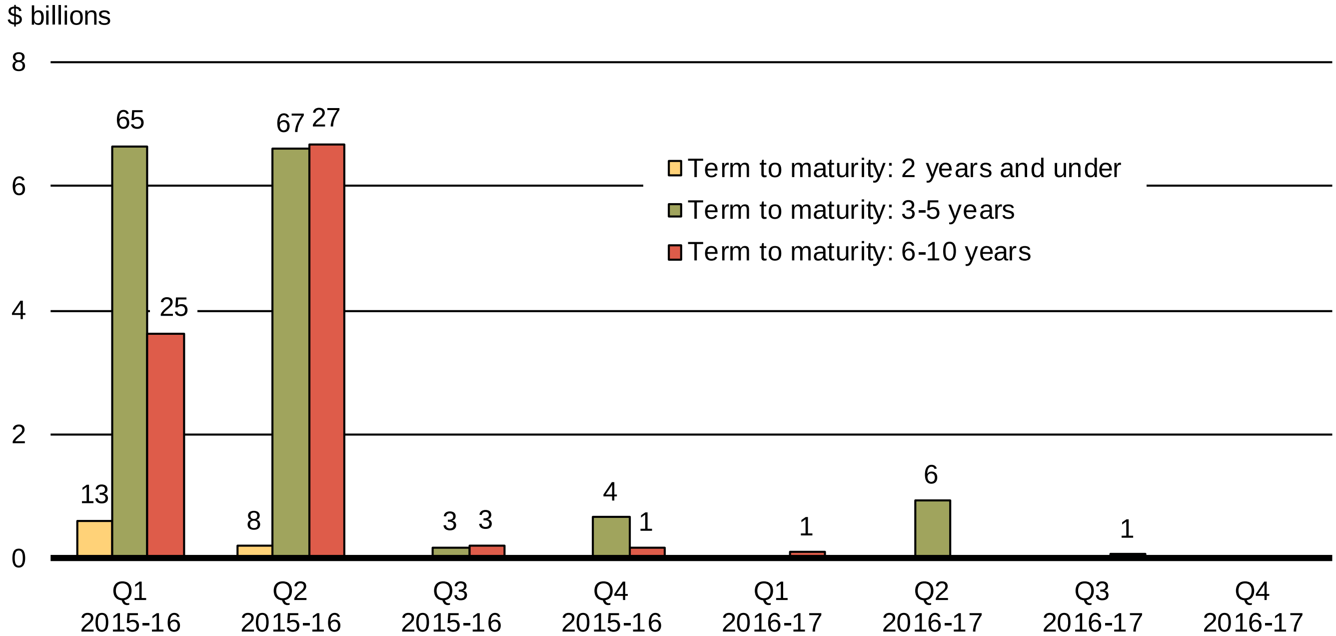

Annualized Monthly Trading Volume / Total Bond Stock
As of June 30, 2017

**Supporting secondary market liquidity:** The Bank of Canada operates a securities-lending program to support the liquidity of Government of Canada securities by providing a secondary and temporary source of securities to the market. The program is triggered when market pricing for Government of Canada bonds and bills in repurchase transactions moves beyond a specified point.[11]

[11] See www.bankofcanada.ca/2015/10/securities-lending-program/.

More liquid markets in 2016–17 resulted in a reduction in demand for securities-lending operations. Consequently, the Bank of Canada conducted only 8 securities-lending operations in 2016–17, compared to 216 operations in 2015–16 (see Chart 14). Securities-lending operations are generally conducted to alleviate tightness in markets for Government of Canada bonds. A bond is considered "tight", or trading "on special", when the repo rate (i.e., the rate of interest to be paid on the loan in a repurchase agreement between two parties) is below the general collateral rate (i.e., the repo rate on general collateral, or in this case, the Bank of Canada's overnight rate).

Chart 14
**Securities Lending Operations**




Annualized Monthly Trading Volume / Total Bond Stock
As of June 30, 2017

**Using the regular bond buyback program:** Bond buyback operations on a cash basis and on a switch basis involve the purchase of bonds with a remaining term to maturity of 12 months to 25 years. Bond buyback operations on a cash basis involve the exchange of a bond for cash. Bond buyback operations on a switch basis, on the other hand, involve the exchange of one bond for another, on a duration-neutral basis (e.g., an off-the-run bond for the building benchmark bond).[12]

In 2016–17, there were two regular bond buybacks on a switch basis. Both of these operations involved the exchange of an off-the-run bond for another bond that will become the 30-year benchmark. Switch operations amounted to $998 million at par value, which was $342 million higher than the switch operation that occurred in 2015–16. There were no regular bond buybacks on a cash basis in 2016–17.

[12] The amount of new bonds issued through buybacks on a switch basis does not necessarily equal the amount of old bonds bought back through those operations because the exchange is not based on par value, but rather is on a duration-neutral equivalent basis.

# Part III
# Report on the 2016–17 Debt Program

In 2016–17, treasury bill and bond auctions continued to perform well. Demand for Government of Canada securities remained strong throughout the fiscal year as a result of persistent demand for high-quality sovereign debt securities, and Canada's strong fiscal and economic position.

## Domestic Marketable Bonds

### Bond Program

In 2016–17, gross bond issuance was $133.4 billion (including issuance through switch buybacks), $41.0 billion higher than the $92.4 billion issued in 2015–16. Gross issuance consisted of $131.2 billion in nominal bonds (including switch operations) and $2.2 billion in Real Return Bonds (see Table 4). Taking into account net issuance and maturities, the stock of outstanding bonds increased by $31.8 billion to $535.9 billion, as at March 31, 2017.

Table 4
**Annual Bond Program Operations**
$ billions

| | 2012–13 | 2013–14 | 2014–15 | 2015–16 | 2016–17 |
|---|---|---|---|---|---|
| Nominal | 92.6 | 84.5 | 96.0 | 89.8 | 130.4 |
| Nominal (switch) | 0.8 | 0.8 | 0.4 | 0.4 | 0.8 |
| Real Return Bonds | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Total gross issuance | 95.6 | 87.5 | 98.6 | 92.4 | 133.4 |
| Cash buyback | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Switch buyback | -1.1 | -1.0 | -0.5 | -0.4 | -0.8 |
| Total buyback | -1.5 | -1.0 | -0.5 | -0.4 | -0.8 |
| Net issuance | 94.1 | 86.5 | 98.1 | 92.0 | 132.6 |

Note: Numbers may not add due to rounding.
Source: Bank of Canada.

### Auction Result Indicators for Domestic Bonds

The auction tail represents the number of basis points between the highest yield accepted and the average yield of an auction. A small auction tail is preferable as it is generally indicative of better transparency in the pricing of securities. Average auction tails were below the 5-year average across all maturities in 2016–17, with the exception of the auction tail for the 30-year sector, which was above the 5-year average (see Table 5).[13] A total of 37 nominal bond auctions were conducted in 2016–17, nine more than in 2015–16.

[13] Tails are not calculated for Real Return Bond auctions since successful bidders are allotted bonds at the single-price equivalent of the highest real yield (single-price auction type) of accepted competitive bids. See Section 5 of the *Standard Terms for Auctions of Government of Canada Securities* (www.bankofcanada.ca/wp-content/uploads/2016/08/standard-terms-securities180816.pdf).

Auction coverage is defined as the total amount of bids received, including bids from the Bank of Canada, divided by the amount auctioned. All else being equal, a higher auction coverage level typically reflects strong demand and therefore should result in a lower average auction yield. Bond auctions in 2016–17 continued to be well-covered across all sectors, but were below 5-year averages. This decline is partially explained by the Bank of Canada’s cutback on purchases at auctions.

Table 5
**Performance at Domestic Bond Auctions**

| | | Nominal bonds | | | | | Real Return Bonds |
|---|---|---|---|---|---|---|---|
| | | 2-year | 3-year | 5-year | 10-year | 30-year | 30-year |
| Tail | 2016–17 | 0.13 | 0.21 | 0.30 | 0.38 | 0.41 | n/a |
| | 5-year average | 0.18 | 0.25 | 0.31 | 0.46 | 0.35 | n/a |
| Coverage | 2016–17 | 2.55 | 2.46 | 2.46 | 2.33 | 2.28 | 2.20 |
| | 5-year average | 2.66 | 2.69 | 2.58 | 2.48 | 2.59 | 2.56 |

Notes: Tail represents the number of basis points between the highest yield accepted and the average yield of an auction. Coverage is defined as the total amount of bids received, including bids from the Bank of Canada, divided by the amount auctioned.
Source: Bank of Canada.

## Participation at Domestic Bond Auctions

In 2016–17, primary dealers (PDs) were allotted 74 per cent of auctioned nominal bonds and customers were allotted 26 per cent (see Table 6), excluding the Bank of Canada’s allotment.[14] In aggregate, the 10 most active participants were in total allotted 85 per cent of these securities. Primary dealers’ share of the Real Return Bond allotments increased from 23 per cent in 2015–16 to 38 per cent in 2016–17, while over the same period customers’ allocations decreased from 77 per cent to 62 per cent.

[14] The Bank of Canada purchased 14 to 15 per cent of the amount issued at each nominal bond auction in 2016–17. A customer is a bidder on whose behalf a government securities distributor (GSD) has been directed to submit a competitive or non-competitive bid for a specified amount of securities at a specific price.

Table 6

**Historical Share of Bonds Allotted by Participant Category[1]**

**Nominal Bonds**

| Participant type | 2012–13 | | 2013–14 | | 2014–15 | | 2015–16 | | 2016–17 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) |
| PDs | 61 | 83 | 54 | 79 | 62 | 84 | 54 | 73 | 96 | 74 |
| Non-PD GSDs | 2 | 3 | 6 | 9 | 2 | 3 | 0 | 0 | 0 | 0 |
| Customers | 12 | 16 | 7 | 10 | 10 | 14 | 20 | 27 | 34 | 26 |
| Top 5 participants | 50 | 54 | 51 | 60 | 60 | 65 | 47 | 57 | 72 | 55 |
| Top 10 participants | 73 | 79 | 70 | 83 | 83 | 90 | 71 | 86 | 111 | 85 |
| Total nominal bonds issued | 93 | | 85 | | 74 | | 74 | | 130 | |

**Real Return Bonds**

| Participant type | 2012–13 | | 2013–14 | | 2014–15 | | 2015–16 | | 2016–17 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) |
| PDs | 1 | 36 | 1 | 40 | 1 | 55 | 1 | 23 | 1 | 38 |
| Non-PD GSDs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Customers | 1 | 64 | 1 | 60 | 1 | 44 | 2 | 77 | 1 | 62 |
| Top 5 participants | 1 | 59 | 1 | 53 | 1 | 54 | 2 | 52 | 1 | 66 |
| Top 10 participants | 2 | 80 | 2 | 77 | 2 | 76 | 2 | 75 | 2 | 87 |
| Total Real Return Bonds issued | 2 | | 2 | | 2 | | 2 | | 2 | |

Note: Numbers may not add due to rounding.

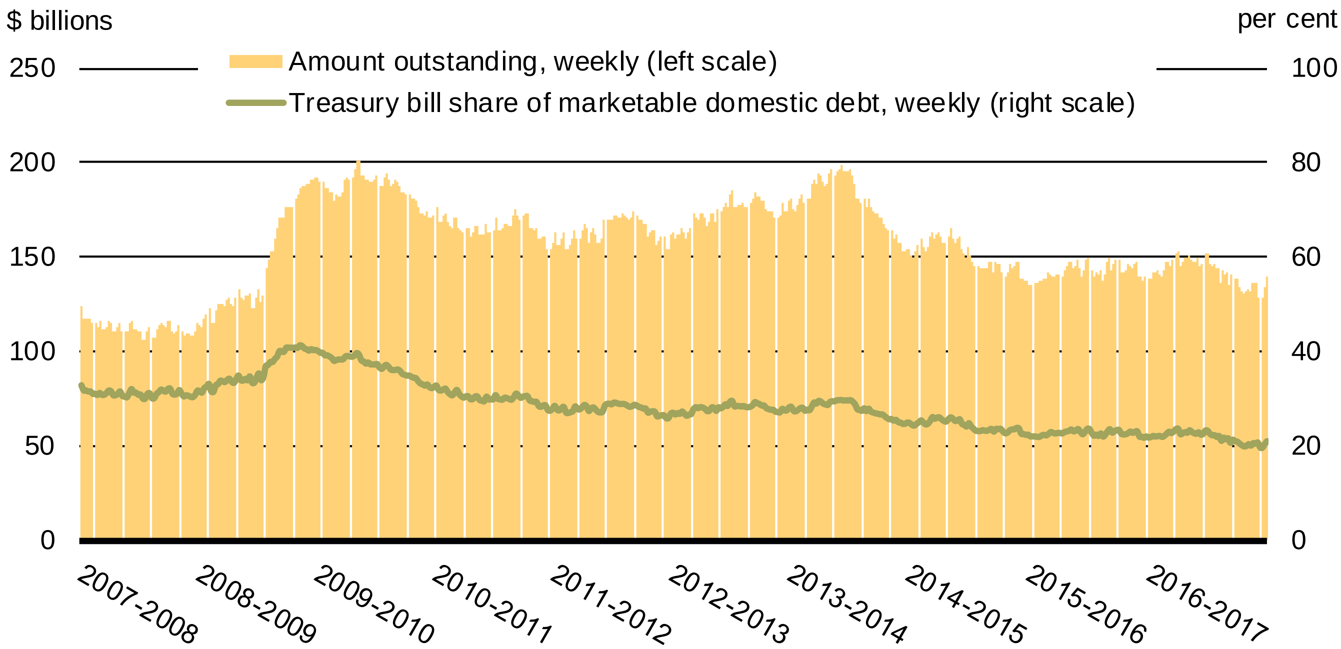
[1] Not including Bank of Canada allotment.

Source: Bank of Canada.

# Treasury Bills and Cash Management Bills

During 2016–17, $291.0 billion in 3-, 6- and 12-month treasury bills were issued, a decrease of $9.0 billion from the previous year. There were also 31 cash management bill operations for a total of $79.5 billion in 2016–17, compared to 24 operations and a total of $57.5 billion in 2015–16. Together, treasury bill and cash management bill issuance totalled $370.5 billion. As at March 31, 2017, the combined treasury and cash management bill stock totalled $136.7 billion, a decrease of $1.4 billion from the end of 2015–16 (see Chart 15).

Chart 15
**Treasury Bills Outstanding and as a Share of Marketable Domestic Debt**




Source: Bank of Canada

In 2016–17, all treasury bill and cash management bill auctions were fully covered. Auction tails were equal to or slightly higher than the 5-year average across treasury bill maturity sectors and coverage ratios for treasury bill auctions in 2016–17 were lower than the 5-year average (see Table 7).

Table 7

**Performance at Treasury Bill and Cash Management Bill Auctions**

| | | 3-month | 6-month | 12-month | Cash management bills |
|---|---|---|---|---|---|
| Tail | 2016–17 | 0.47 | 0.44 | 0.34 | 1.10 |
| | 5-year average | 0.41 | 0.37 | 0.34 | 1.23 |
| Coverage | 2016–17 | 2.04 | 2.23 | 2.31 | 2.78 |
| | 5-year average | 2.16 | 2.45 | 2.47 | 2.52 |

Notes: Tail represents the number of basis points between the highest yield accepted and the average yield of an auction. Coverage is defined as the total amount of bids received, including bids from the Bank of Canada, divided by the amount auctioned. Tail and coverage ratio were calculated as the weighted averages, where the weight assigned to each auction equals the percentage total allotment in the auction's issuance sector.

Source: Bank of Canada.

## Participation at Treasury Bill Auctions

In 2016–17, the share of treasury bills allotted to primary dealers increased by 2 percentage points to 87 per cent, while the share allotted to customers decreased by 2 percentage points to 13 per cent (see Table 8). The 10 most active participants were in total allotted 90 per cent of these securities.

Table 8

**Historical Share of Amount Allotted to Participants by Type of Auction[1]**

Treasury Bills

| Participant type | 2012–13 | | 2013–14 | | 2014–15 | | 2015–16 | | 2016–17 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) | ($ billions) | (%) |
| PDs | 279 | 75 | 274 | 78 | 307 | 84 | 225 | 85 | 253 | 87 |
| Non-PD GSDs | 10 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Customers | 84 | 23 | 75 | 21 | 60 | 16 | 39 | 15 | 38 | 13 |
| Top 5 participants | 236 | 63 | 221 | 63 | 230 | 63 | 217 | 72 | 198 | 68 |
| Top 10 participants | 308 | 83 | 301 | 85 | 310 | 85 | 264 | 87 | 262 | 90 |
| Total treasury bills issued | 373 | | 353 | | 367 | | 264 | | 291 | |

Note: Numbers may not add due to rounding.

1 Net of Bank of Canada allotment.

Source: Bank of Canada.

### Prudential Liquidity Management

The Government holds liquid financial assets in the form of domestic cash deposits and foreign exchange reserves to promote investor confidence and safeguard its ability to meet payment obligations in situations where normal access to funding markets may be disrupted or delayed. In 2016–17, the Government's overall liquidity levels were maintained to cover at least one month of net projected cash flows, including coupon payments and debt refinancing needs.

## Foreign Currency Debt

Foreign currency debt is used to fund the Exchange Fund Account (EFA), which represents the largest component of the official international reserves. The primary objectives of the international reserves are to provide the Government of Canada with general foreign currency liquidity and the ability to intervene in the foreign exchange market for the Canadian dollar.

The EFA is primarily made up of liquid foreign currency securities and special drawing rights (SDRs). Liquid foreign currency securities are composed primarily of the debt securities of highly rated sovereigns, their agencies that borrow in public markets and are supported by a comprehensive government guarantee, and highly rated supranational organizations. SDRs are international reserve assets created by the International Monetary Fund (IMF) whose value is based on a basket of international currencies. The official international reserves also include Canada's reserve position at the IMF. This position, which represents Canada's investment in the activities of the IMF, fluctuates according to drawdowns and repayments from the IMF. The *Report on the Management of Canada's Official International Reserves* (www.fin.gc.ca/purl/efa-eng.asp) provides information on the objectives, composition and performance of the reserves portfolio.

The market value of Canada's official international reserves increased to US$82.6 billion as at March 31, 2017 from US$82.2 billion as at March 31, 2016. The change comprised a US$551 million increase in EFA assets and a US$189 million decrease in the IMF reserve position. EFA assets, which totalled US$80.4 billion as at March 31, 2017, were held at a level that is consistent with the Government's commitment to maintain holdings of liquid foreign exchange reserves at or above 3 per cent of nominal GDP.

The EFA is funded by liabilities of the Government of Canada denominated in, or converted to, foreign currencies. Funding requirements are primarily met through an ongoing program of cross-currency swaps of domestic bond issues. As at March 31, 2017, Government of Canada cross-currency swaps outstanding stood at US$58.1 billion (par value).

In addition to cross-currency swaps of domestic bond issues, the EFA is funded through a short-term US-dollar paper program (Canada bills), medium-term note (MTN) issuance in various markets (Canada notes, euro medium-term notes (EMTNs)) and international bond issues (global bonds). The funding method of choice depends on funding needs, costs, market conditions and funding diversification objectives (see Table 9).

Table 9

**Outstanding Foreign Currency Issues**

par value in US$ millions

| | March 31, 2017 | March 31, 2016 | Change |
|---|---|---|---|
| Swapped domestic issues | 58,143 | 53,076 | 5,067 |
| Global bonds | 8,634 | 11,776 | -3,142 |
| Canada bills | 2,305 | 2,125 | 180 |
| Euro medium-term notes | 810 | 1,221 | -411 |
| Canada notes | 1,150 | 650 | 500 |
| Total | 71,042 | 68,848 | 2,194 |

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2017.

As at March 31, 2017, the Government of Canada had three global bonds outstanding.

Table 10

**Government of Canada Global Bonds Outstanding, as at March 31, 2017**

| Year of issuance | Market | Amount in original currency | Yield (%) | Term to maturity (years) | Coupon (%) | Benchmark interest rate—government bonds | Spread from benchmark at issuance (basis points) | Spread over swap curve in relevant currency on issuance date (basis points) |
|---|---|---|---|---|---|---|---|---|
| 2010 | Global | €2 billion | 3.571 | 10 | 3.500 | Germany | 19.4 | EURIBOR + 2.0 |
| 2014 | Global | US$3 billion | 1.658 | 5 | 1.625 | US | 11.0 | LIBOR - 1.0 |
| 2015 | Global | US$3.5 billion | 1.199 | 3 | 1.125 | US | 9.0 | LIBOR - 12 |

Notes: EURIBOR = Euro Interbank Offered Rate. LIBOR = London Interbank Offered Rate.

Source: Department of Finance Canada.

The MTN program provides the Government with additional flexibility to raise foreign currency. The program allows for issuance in a number of currencies, including the US dollar, euro and British pound sterling, using either a US MTN or EMTN prospectus. During 2016–17, US$500 million of MTNs were issued in US dollars with a 3-year term at an average funding cost equivalent to 3-month US$ LIBOR less 0.6 basis points.

Table 11

**Government of Canada Medium-Term Notes Outstanding, as at March 31, 2017**

| Date of issuance | Date of maturity | Market | Amount | Yield | Term to maturity (years) | Fixed /floating | Interest rate basis | Index maturity | Spread over swap curve in relevant currency on issuance date (basis points) |
|---|---|---|---|---|---|---|---|---|---|
| 10-Dec-2013 | 10-Dec-2019 | Canada notes | US$50,000,000 | 1.86% | 6 | Fixed | | | LIBOR - 2 |
| 13-Dec-2013 | 13-Dec-2019 | Canada notes | US$50,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR - 2 |
| 20-Dec-2013 | 20-Dec-2020 | Canada notes | US$50,000,000 | 2.30% | 7 | Fixed | | | LIBOR + 0 |
| 19-Mar-2014 | 19-Mar-2020 | EMTN | US$125,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR + 0 |
| 08-May-2014 | 08-May-2020 | EMTN | US$125,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR + 0 |
| 10-Jun-2014 | 10-Jun-2020 | Canada notes | US$100,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR - 2 |
| 10-Sep-2014 | 10-Sep-2020 | Canada notes | US$250,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR - 2 |
| 15-Sep-2014 | 15-Sep-2020 | Canada notes | US$50,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR - 3 |
| 15-Jan-2015 | 15-Jan-2021 | EMTN | €150,000,000 | 0.15% | 6 | Fixed | | | 6 month EURIBOR - 27.5 |
| 24-Aug-2015 | 24-Aug-2021 | Canada notes | US$50,000,000 | | 6 | Floating | US$ LIBOR | 3 month | LIBOR + 0 |
| 25-Aug-2015 | 25-Aug-2019 | Canada notes | US$50,000,000 | 1.454% | 4 | Fixed | | | LIBOR - 6 |
| 27-Aug-2015 | 27-Aug-2018 | EMTN | US$250,000,000 | | 3 | Floating | US$ LIBOR | 3 month | LIBOR - 10.5 |
| 10-Feb-2016 | 10-Feb-2020 | Canada notes | US$150,000,000 | 1.276% | 4 | | | | LIBOR+ 15 |
| 21-Jul-2016 | 21-Jul-2019 | Canada notes | US$150,000,000 | | 3 | Floating | US$ LIBOR | 3 month | LIBOR + 2 |
| 07-Sep-2016 | 06-Sep-2019 | Canada notes | US$100,000,000 | | 3 | Floating | US$ LIBOR | 3 month | LIBOR - 6 |
| 13-Jan-2017 | 13-Jan-2020 | Canada notes | US$250,000,000 | | 3 | Floating | US$ LIBOR | 3 month | LIBOR + 0 |

Notes: LIBOR = London Interbank Offered Rate. EURIBOR = Euro Interbank Offered Rate.

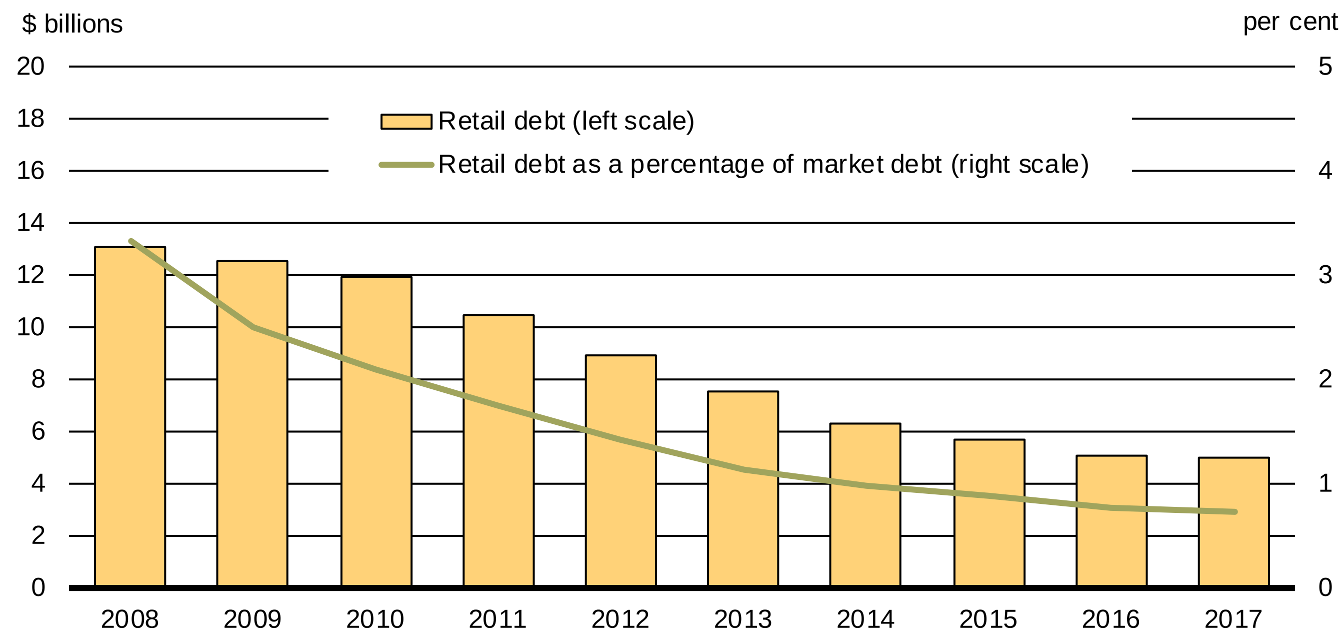
Source: Department of Finance Canada.

# Retail Debt

In 2016–17, the level of outstanding Canada Savings Bonds and Canada Premium Bonds held by retail investors decreased from $5.1 billion to $4.5 billion. Retail debt represented around 0.7 per cent of total market debt as at March 31, 2017 (see Chart 16).

Given an overall decline in the sales of Canada Savings Bonds products, a proliferation of alternative investment vehicles for consumers, and management and administration costs of the program, retail debt is no longer a cost-effective source of funds or a preferred investment by Canadians. Consequently, the Government of Canada will discontinue the sales of retail debt products in 2017. All outstanding retail debt will continue to be honoured.

Chart 16
**Evolution of Retail Debt Stock, as at March 31**




Source: Bank of Canada

In 2016–17, gross sales and redemptions were $1.4 billion and $2.0 billion, respectively, for a net reduction of $0.5 billion in the stock of retail debt (see Table 12).

Table 12
**Retail Debt Gross Sales and Redemptions, 2016–17**
$ billions

| | Gross sales | Redemptions | Net change |
|---|---|---|---|
| Payroll | 1.3 | 1.4 | -0.1 |
| Cash | 0.1 | 0.6 | -0.4 |
| Total | 1.4 | 2.0 | -0.5 |

Note: Numbers may not add due to rounding.
Source: Bank of Canada.

# Cash Management

The Bank of Canada, as the Government's fiscal agent, manages the Receiver General (RG) Consolidated Revenue Fund, from which the balances required for the Government's day-to-day operations are drawn. The core objective of cash management is to ensure that the Government has sufficient cash available at all times to meet its operating requirements.

Cash consists of money on deposit to the credit of the Receiver General for Canada with the Bank of Canada, chartered banks and other financial institutions. Cash with the Bank of Canada includes operational balances and a callable demand deposit held for the prudential liquidity plan.

RG cash balances increased by $0.1 billion to $28.8 billion by the end of 2016–17 (see Table 13 and Chart 17).

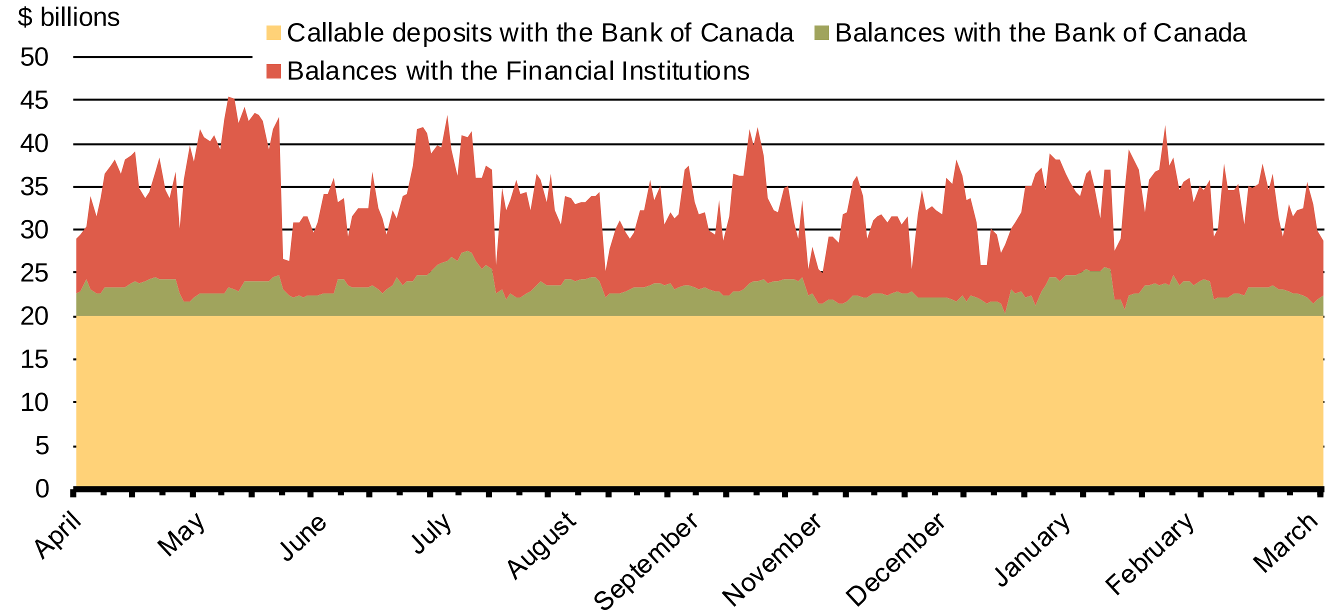
Table 13
**Daily Liquidity Position**
$ billions

| | March 31, 2016 | March 31, 2017 | Average | Net change |
|---|---|---|---|---|
| Callable deposits with the Bank of Canada | 20.0 | 20.0 | 20.0 | 0.0 |
| Balances with the Bank of Canada | 2.5 | 2.5 | 2.5 | 0.0 |
| Balances with financial institutions | 6.2 | 6.3 | 6.3 | 0.1 |
| Total | 28.7 | 28.8 | 28.8 | 0.1 |

Note: Numbers may not add due to rounding.
Source: Bank of Canada.

Chart 17

**Daily Liquidity Position for 2016-17**




Source: Bank of Canada

# Investment of Receiver General Cash Balances

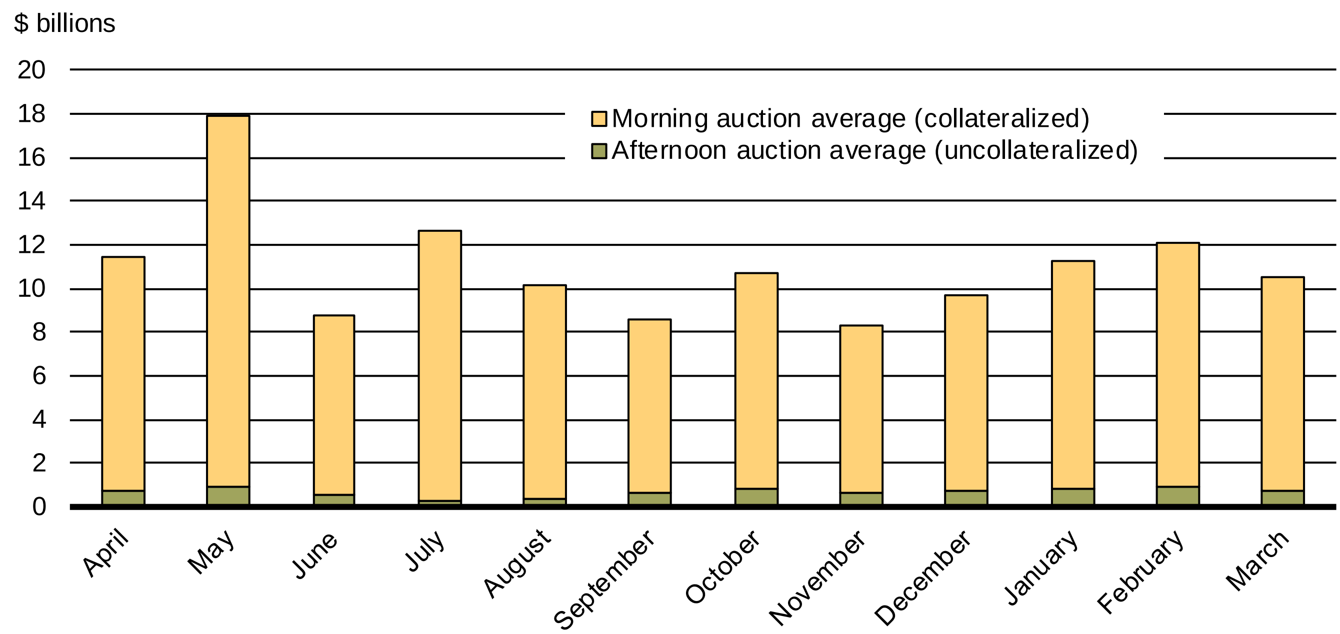
RG cash balances are invested in a prudent and cost-effective manner via short-term deposits allocated through auctions to chartered banks and other financial institutions. Since February 1999, when Canada's electronic funds transfer system—the Large Value Transfer System—was implemented, RG cash balances have been allocated to bidders twice daily through an auction process administered by the Bank of Canada. Roughly 90 per cent of daily RG cash balances are auctioned off in the morning auction while the remaining 10 per cent are auctioned off in the afternoon auction. These auctions serve two main purposes: first, as a treasury management tool, they are the means by which the Government invests its excess short-term Canadian-dollar cash balances; second, the auctions are used by the Bank of Canada in its monetary policy implementation to neutralize the impact of public sector flows on the level of settlement balances available to the financial system.

The balances placed via the morning auction are fully collateralized, which reduces the Government's exposure to counterparty credit risk. The balances placed via the afternoon auction for a term of one business day (i.e. overnight) remain completely uncollateralized as the auction process typically takes place late in the day and, as a result, operational constraints do not allow for collateralization before day's end (see Chart 18).

A key measure of the cost to the Government of maintaining cash balances is the net return on these cash balances—the difference between the return on government cash balances auctioned to financial institutions (typically around the overnight rate) and the weighted average yield paid on treasury bills. A typically upward sloping yield curve results in a cost of carry for the Government, as financial institutions pay rates of interest for government deposits based on an overnight rate that is lower than the rate paid by the Government to issue treasury bills. Conversely, under an inverted yield curve, short-term deposit rates are higher than the average of 3- to 12-month treasury bill rates, which can result in a net gain for the Government.

In 2016–17, treasury bill yields traded predominantly above the overnight rate, resulting in a loss of carrying cash of $6.9 million for the fiscal year, compared to a gain of $2.2 million in 2015–16 and a gain of $3.2 million in 2014–15.

Chart 18
**Allocation of Cash Balances for Receiver General Auctions**
(Average of Daily Balances for Each Month of 2016-17 Fiscal Year)




Source: Bank of Canada

# Cash Management Bond Buyback Program

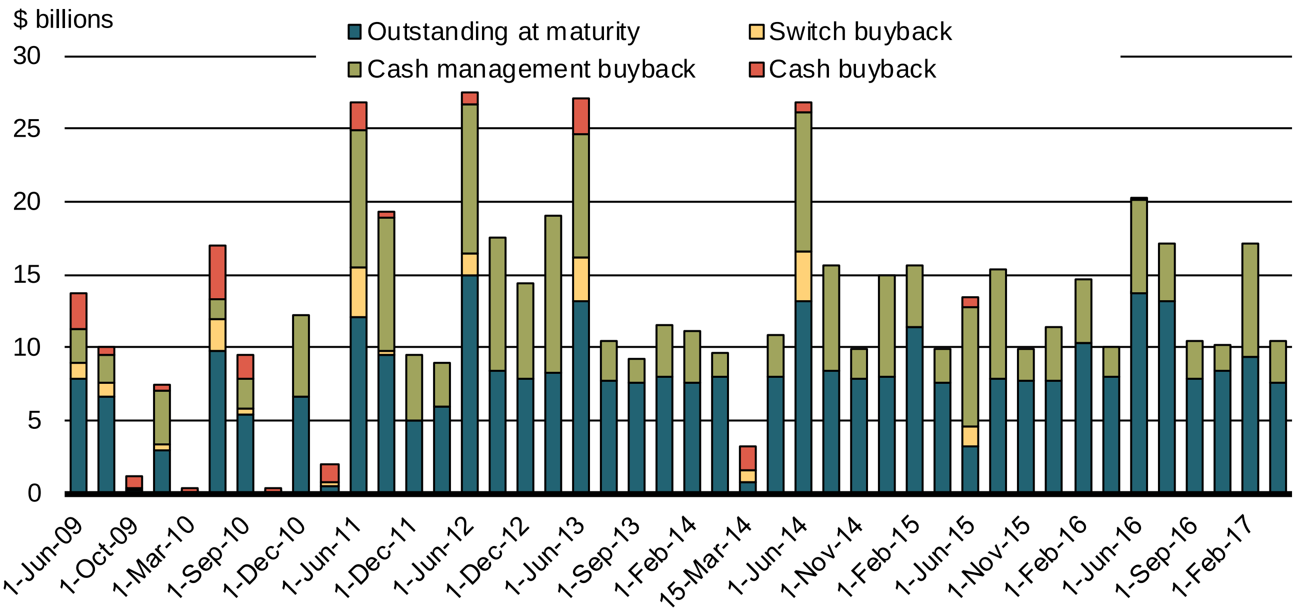
The cash management bond buyback (CMBB) program helps manage cash requirements by reducing the high levels of cash balances needed for key maturity and coupon payment dates. The program also helps smooth variations in treasury bill auction sizes over the year and reduce rollover risk. Securities targeted under this program are Government of Canada bonds with a term to maturity of up to 18 months where the total amount of maturing bonds is greater than $8 billion.

In 2016–17, the total amount of bonds repurchased through the CMBB program was $33.3 billion, compared to $24.0 billion in 2015–16. With the maximum amount of CMBBs allowed for these years being $38.9 billion and $35.0 billion respectively, the program had a success rate of 85.6 per cent for 2016–17 and 68.4 per cent for 2015–16. Overall, the CMBB program, together with the switch buyback and cash buyback programs, has contributed to reducing the size of the 2016 May 1, June 1, August 1, September 1 and November 1, as well as the 2017 February 1 and March 1, bond maturities by about 29 per cent, from a total of $95.5 billion outstanding when first targeted by the program to $68.1 billion outstanding at time of maturity.

In January 2017, a pilot for the CMBB program was announced that increased the flexibility in the maximum repurchase amount at each operation. See the press release at www.bankofcanada.ca/2017/01/pilot-government-canada-cash-management-bond-buyback-program/ for more details.

Together, the CMBB and regular bond buyback programs have been an important factor in smoothing the amount of bonds outstanding across different maturity dates. The impact of repurchase operations is especially evident for June maturities (see Chart 19).

Chart 19
**Impact of Repurchase Operations on Bond Maturities**




Source: Bank of Canada

# Annex 1
# Completed Treasury Evaluation Reports

In order to inform future decision making and to support transparency and accountability, different aspects of the Government of Canada's treasury activities are reviewed periodically under the Treasury Evaluation Program. The program's purpose is to obtain periodic external assessments of the frameworks and processes used in the management of wholesale and retail market debt, cash and reserves as well as the treasury activities of other entities under the authority of the Minister of Finance.

Reports on the findings of these evaluations and the Government's response to each evaluation are tabled with the House of Commons Standing Committee on Public Accounts by the Minister of Finance. Copies are also sent to the Auditor General of Canada. The reports are posted on the Department of Finance Canada website.

| Area | Year |
|---|---|
| Debt Management Objectives | 1992 |
| Debt Structure—Fixed/Floating Mix | 1992 |
| Internal Review Process | 1992 |
| External Review Process | 1992 |
| Benchmarks and Performance Measures | 1994 |
| Foreign Currency Borrowing—Canada Bills Program | 1994 |
| Developing Well-Functioning Bond and Bill Markets | 1994 |
| Liability Portfolio Performance Measurement | 1994 |
| Retail Debt Program | 1994 |
| Guidelines for Dealing With Auction Difficulties | 1995 |
| Foreign Currency Borrowing—Standby Line of Credit and FRN | 1995 |
| Treasury Bill Program Design | 1995 |
| Real Return Bond Program | 1998 |
| Foreign Currency Borrowing Programs | 1998 |
| Initiatives to Support a Well-Functioning Wholesale Market | 2001 |
| Debt Structure Target/Modelling | 2001 |
| Reserves Management Framework[1] | 2002 |
| Bond Buybacks[1] | 2003 |
| Funds Management Governance Framework[1] | 2004 |
| Retail Debt Program[1] | 2004 |
| Borrowing Framework of Major Federal Government-Backed Entities[1] | 2005 |
| Receiver General Cash Management Program[1] | 2006 |
| Exchange Fund Account Evaluation[1] | 2006 |
| Risk Management Report[1] | 2007 |
| Evaluation of the Debt Auction Process[1] | 2010 |
| Evaluation of the Asset Allocation Framework of the Exchange Fund Account[1] | 2012 |
| Report of the Auditor General of Canada on Interest-Bearing Debt[2] | 2012 |
| Crown Borrowing Program Evaluation[1] | 2013 |
| Retail Debt Evaluation[1] | 2015 |

[1] Available on the Department of Finance Canada website (www.fin.gc.ca).
[2] This audit was conducted outside of the Treasury Evaluation Program.

# Annex 2
# Debt Management Policy Measures Taken Since 1997

The fundamental objective of debt management is to raise stable and low-cost funding to meet the needs of the Government of Canada. Achieving stable, low-cost funding involves striking a balance between debt costs and various risks in the debt structure, which is mostly achieved through the deliberate allocation of issuance between various debt instruments. An associated objective of debt management is to maintain a well-functioning market in Government of Canada securities, which benefits a wide range of market participants and the broader Canadian capital markets. For the Government as a debt issuer, a well-functioning market attracts investors and contributes to keeping funding costs low and stable over time. For market participants, a liquid and transparent secondary market in government debt provides risk-free assets for investment portfolios, a pricing benchmark for other debt issues and derivatives, and a primary tool for hedging interest rate risk. The following table lists significant policy measures that have been taken to achieve stable, low-cost funding and ensure a well-functioning Government of Canada securities market.

| Measure | Year |
|---|---|
| Dropped the 3-year bond benchmark | 1997 |
| Moved from weekly to bi-weekly treasury bill auctions | 1998 |
| Introduced a cash-based bond buyback program | 1999 |
| Introduced standardized benchmarks (fixed maturities and increased size) | 1999 |
| Started regular cross-currency swap-based funding of foreign assets | 1999 |
| Introduced a switch-based bond buyback program | 2001 |
| Allowed the reconstitution of bonds beyond the size of the original amount issued | 2001 |
| Introduced the cash management bond buyback program | 2001 |
| Reduced targeted turnaround times for auctions and buyback operations | 2001 |
| Advanced the timing of treasury bill auctions from 12:30 p.m. to 10:30 a.m. | 2004 |
| Advanced the timing of bond auctions from 12:30 p.m. to 12:00 p.m. | 2005 |
| Reduced the timing between bond auctions and cash buybacks to 20 minutes | 2005 |
| Dropped one quarterly 2-year auction | 2006 |
| Announced the maintenance of benchmark targets through fungibility (common dates) | 2006 |
| Consolidated the borrowings of three Crown corporations | 2007 |
| Changed the maturity of the 5-year benchmark and dropped one quarterly 5-year auction | 2007 |
| Reintroduced the 3-year bond benchmark | 2009 |
| Increased the frequency of cash management bond buyback operations from bi-weekly to weekly | 2010 |
| Announced a new framework for the medium-term debt management strategy | 2011 |
| Announced plans to increase the level of prudential liquidity by $35 billion over 3 years | 2011 |
| Added four new maturity dates—February 1, May 1, August 1 and November 1 | 2011 |
| Increased benchmark target range sizes in the 2-, 3- and 5-year sectors | 2011 |
| Announced a temporary increase in longer-term debt issuance | 2012 |
| Announced changes to the Terms and Conditions Governing the Morning Auction of Receiver General Cash Balances | 2013 |
| Introduced ultra-long bond issuance | 2014 |
| Discontinued 3-year issuance | 2015 |
| Increased benchmark target range sizes in the 2- and 5-year sectors | 2015 |
| Increased benchmark target range sizes in the 2-, 5- and 10-year sectors | 2016 |
| Reintroduced the 3-year bond benchmark | 2016 |

# Annex 3
# Glossary

**asset-liability management:** An investment decision-making framework that is used to concurrently manage a portfolio of assets and liabilities.

**average term to maturity:** The weighted average amount of time until the securities in the debt portfolio mature.

**benchmark bond:** A bond that is considered by the market to be the standard against which all other bonds in that term area are evaluated against. It is typically a bond issued by a sovereign, since sovereign debt is usually the most creditworthy within a domestic market. Usually it is the most liquid bond within each range of maturities and is therefore priced accurately.

**budgetary deficit:** The shortfall between government annual revenues and annual budgetary expenses.

**buyback on a cash basis:** The repurchase of bonds for cash. Buybacks on a cash basis are used to maintain the size of bond auctions and new issuances.

**buyback on a switch basis:** The exchange of outstanding bonds for new bonds in the current building benchmark bond.

**Canada bill:** A promissory note denominated in US dollars, issued for terms of up to 270 days. Canada bills are issued for foreign exchange reserves funding purposes only.

**Canada Investment Bond:** A non-marketable fixed-term security instrument issued by the Government of Canada.

**Canada note:** A promissory note usually denominated in US dollars, and available in book-entry form. Canada notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate. Canada notes are issued for foreign exchange reserves funding purposes only.

**Canada Premium Bond:** A non-marketable security instrument issued by the Government of Canada, which is redeemable once a year on the anniversary date or during the 30 days thereafter without penalty.

**Canada Savings Bond:** A non-marketable security instrument issued by the Government of Canada, which is redeemable on demand by the registered owner(s), and which, after the first three months, pays interest up to the end of the month prior to cashing.

**cross-currency swap:** An agreement that exchanges one type of debt obligation for another involving different currencies and the exchange of the principal amounts and interest payments.

**duration:** Measures the sensitivity of the price of a bond or portfolio to fluctuations in interest rates. It is a measure of volatility and is expressed in years. The higher the duration number, the greater the interest rate risk for bond or portfolio prices.

**electronic trading system:** An electronic system that provides real-time information about securities and enables the user to execute financial trades.

**Exchange Fund Account (EFA):** An account that aids in the control and protection of the external value of the Canadian dollar. Assets held in the EFA are managed to provide foreign currency liquidity to the Government and to promote orderly conditions for the Canadian dollar in the foreign exchange markets, if required.

**financial source/requirement:** The difference between the cash inflows and outflows of the Government's Receiver General account. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet financing needs in any given year.

**fixed-rate share of market debt:** The proportion of market debt that does not mature or need to be repriced within one year (i.e. the inverse of the refixing share of market debt).

**foreign exchange reserves:** The foreign currency assets (e.g. interest-earning bonds) held to support the value of the domestic currency. Canada's foreign exchange reserves are held in the Exchange Fund Account.

**Government of Canada securities auction:** A process used for selling Government of Canada debt securities (mostly marketable bonds and treasury bills) in which issues are sold by public tender to government securities distributors and approved clients.

**government securities distributor:** An investment dealer or bank that is authorized to bid at Government of Canada auctions and through which the Government distributes Government of Canada treasury bills and marketable bonds.

**interest-bearing debt:** Debt consisting of unmatured debt, or debt issued on the credit markets, liabilities for pensions and other future benefits, and other liabilities.

**Large Value Transfer System:** An electronic funds transfer system introduced in February 1999 and operated by the Canadian Payments Association. It facilitates the electronic transfer of Canadian-dollar payments across the country virtually instantaneously.

**marketable bond:** An interest-bearing certificate of indebtedness issued by the Government of Canada, having the following characteristics: bought and sold on the open market; payable in Canadian or foreign currency; having a fixed date of maturity; interest payable either in coupon or registered form; face value guaranteed at maturity.

**marketable debt:** Market debt that is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

**money market:** The market in which short-term capital is raised, invested and traded using financial instruments such as treasury bills, bankers' acceptances, commercial paper, and bonds maturing in one year or less.

**non-market debt:** The Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest payments and payments of matured debt).

**overnight rate; overnight financing rate; overnight money market rate; overnight lending rate:** An interest rate at which participants with a temporary surplus or shortage of funds are able to lend or borrow until the next business day. It is the shortest term to maturity in the money market.

**primary dealer:** A member of the core group of government securities distributors that maintain a certain threshold of activity in the market for Government of Canada securities. The primary dealer classification can be attained in either treasury bills or marketable bonds, or both.

**primary market:** The market in which issues of securities are first offered to the public.

**Real Return Bond:** A bond whose interest payments are based on real interest rates. Unlike standard fixed-coupon marketable bonds, the semi-annual interest payments on Government of Canada Real Return Bonds are determined by adjusting the principal by the change in the Consumer Price Index.

**refixing share of market debt:** The proportion of market debt that matures or needs to be repriced within one year (i.e. the inverse of the fixed-rate share of market debt).

**refixing share of market debt to gross domestic product (GDP):** The amount of market debt that matures or needs to be repriced within one year relative to nominal GDP for that year.

**secondary market:** The market where existing securities trade after they have been sold to the public in the primary market.

**sovereign market:** The market for debt issued by a government.

**treasury bill:** A short-term obligation sold by public tender. Treasury bills, with terms to maturity of 3, 6 or 12 months, are currently auctioned on a bi-weekly basis.

**ultra-long bond:** A bond with a maturity of 40 years or longer.

**yield curve:** The conceptual or graphic representation of the term structure of interest rates. A “normal” yield curve is upward sloping, with short-term rates lower than long-term rates. An “inverted” yield curve is downward sloping, with short-term rates higher than long-term rates. A “flat” yield curve occurs when short-term rates are the same as long-term rates.

# Annex 4
# Contact Information

Consultations and Communications Branch
Department of Finance Canada
14th floor
90 Elgin Street
Ottawa, Ontario K1A 0G5

Phone: 613-369-3710
Facsimile: 613-369-4065
TTY: 613-369-3230
E-mail: fin.financepublic-financepublique.fin@canada.ca

Media Enquiries:
613-369-4000

# Reference Tables

| | |
|---|---|
| I | Gross Public Debt, Outstanding Market Debt and Debt Charges, as at March 31 |
| II | Government of Canada Outstanding Market Debt, as at March 31 |
| III | Issuance of Government of Canada Domestic Bonds |
| IV | Outstanding Government of Canada Domestic Bonds, as at March 31, 2017 |
| V | Government of Canada Cross-Currency Swaps Outstanding, as at March 31, 2017 |
| VI | Crown Corporation Borrowings, as at March 31 |

Reference Table I

## Gross Public Debt, Outstanding Market Debt and Debt Charges, as at March 31

$ billions

| | Gross public debt | | | | |
|---|---|---|---|---|---|
| Year | Market debt | Market debt value adjustments | Accounts payable and accrued liabilities | Pension and other liabilities | Gross debt |
| 1986 | 201.2 | -0.4 | 39.4 | 79.1 | 319.4 |
| 1987 | 228.6 | -0.4 | 42.1 | 84.7 | 355.0 |
| 1988 | 250.8 | -0.9 | 47.2 | 90.9 | 388.0 |
| 1989 | 276.3 | -2.2 | 50.2 | 97.1 | 421.4 |
| 1990 | 294.6 | -2.9 | 53.2 | 104.5 | 449.3 |
| 1991 | 323.9 | -3.2 | 54.9 | 112.1 | 487.7 |
| 1992 | 351.9 | -2.2 | 56.1 | 118.5 | 524.2 |
| 1993 | 382.7 | -3.0 | 58.4 | 125.1 | 563.2 |
| 1994 | 414.0 | -1.8 | 63.7 | 131.4 | 607.3 |
| 1995 | 441.0 | -3.4 | 71.3 | 139.8 | 648.7 |
| 1996 | 469.5 | -1.7 | 74.9 | 148.5 | 691.3 |
| 1997 | 476.9 | 0.3 | 75.9 | 156.3 | 709.4 |
| 1998 | 466.8 | 1.4 | 81.7 | 160.9 | 710.8 |
| 1999 | 457.7 | 2.6 | 83.7 | 168.2 | 712.2 |
| 2000 | 454.2 | -0.2 | 83.9 | 175.8 | 713.6 |
| 2001 | 444.9 | 1.3 | 88.5 | 179.0 | 713.6 |
| 2002 | 440.9 | 0.9 | 83.2 | 177.9 | 703.0 |
| 2003 | 438.6 | -1.1 | 83.2 | 178.3 | 699.0 |
| 2004 | 436.5 | -2.5 | 85.2 | 180.9 | 700.1 |
| 2005 | 431.8 | -4.3 | 97.7 | 179.8 | 705.0 |
| 2006 | 427.3 | -6.1 | 101.4 | 179.9 | 702.5 |
| 2007 | 418.8 | -4.7 | 106.5 | 185.1 | 705.8 |
| 2008 | 394.1 | -3.4 | 110.5 | 191.2 | 692.3 |
| 2009 | 510.9 | 3.1 | 114.0 | 196.1 | 824.2 |
| 2010 | 564.4 | -5.3 | 120.5 | 203.7 | 883.3 |
| 2011 | 596.8 | -5.7 | 119.1 | 210.7 | 920.9 |
| 2012 | 631.0 | -4.7 | 125.0 | 216.4 | 967.7 |
| 2013 | 668.0 | 4.4 | 118.7 | 225.0 | 1,016.1 |
| 2014 | 648.7 | 10.3 | 111.4 | 230.4 | 1,000.8 |
| 2015 | 649.5 | 15.7 | 123.6 | 234.8 | 1,023.6 |
| 2016 | 669.7 | 18.5 | 127.9 | 243.5 | 1,059.6 |
| 2017 | 695.1 | 18.5 | 132.5 | 251.1 | 1,097.2 |

Reference Table I

**Gross Public Debt, Outstanding Market Debt and Debt Charges, as at March 31**

$ billions

| | Accumulated deficit and debt charges | | | | | |
|---|---|---|---|---|---|---|
| Year | Gross debt | Financial assets | Net debt | Non-financial assets | Accumulated deficit | Gross public debt charges |
| 1986 | 319.4 | 70.1 | 249.2 | 21.4 | 227.8 | 27.7 |
| 1987 | 355.0 | 73.2 | 281.8 | 24.2 | 257.7 | 28.7 |
| 1988 | 388.0 | 75.0 | 313.0 | 26.3 | 286.7 | 31.2 |
| 1989 | 421.4 | 77.9 | 343.6 | 29.0 | 314.6 | 35.5 |
| 1990 | 449.3 | 74.5 | 374.8 | 31.0 | 343.8 | 41.2 |
| 1991 | 487.7 | 76.6 | 411.1 | 33.4 | 377.7 | 45.0 |
| 1992 | 524.2 | 78.5 | 445.7 | 35.8 | 410.0 | 43.9 |
| 1993 | 563.2 | 76.0 | 487.2 | 38.2 | 449.0 | 41.3 |
| 1994 | 607.3 | 79.3 | 527.9 | 40.4 | 487.5 | 40.1 |
| 1995 | 648.7 | 81.2 | 567.5 | 43.3 | 524.2 | 44.2 |
| 1996 | 691.3 | 92.7 | 598.6 | 44.4 | 554.2 | 49.4 |
| 1997 | 709.4 | 100.4 | 609.0 | 46.1 | 562.9 | 47.3 |
| 1998 | 710.8 | 103.6 | 607.2 | 47.2 | 559.9 | 43.1 |
| 1999 | 712.2 | 109.3 | 602.9 | 48.7 | 554.1 | 43.3 |
| 2000 | 713.6 | 123.5 | 590.1 | 50.2 | 539.9 | 43.4 |
| 2001 | 713.6 | 141.9 | 571.7 | 51.7 | 520.0 | 43.9 |
| 2002 | 703.0 | 137.7 | 565.3 | 53.4 | 511.9 | 39.7 |
| 2003 | 699.0 | 139.5 | 559.6 | 54.2 | 505.3 | 37.3 |
| 2004 | 700.1 | 149.1 | 551.0 | 54.8 | 496.2 | 35.8 |
| 2005 | 705.0 | 155.4 | 549.6 | 54.9 | 494.7 | 34.1 |
| 2006 | 702.5 | 165.6 | 536.9 | 55.4 | 481.5 | 33.8 |
| 2007 | 705.8 | 181.9 | 523.9 | 56.6 | 467.3 | 33.9 |
| 2008 | 692.3 | 176.0 | 516.3 | 58.6 | 457.6 | 33.3 |
| 2009 | 824.2 | 298.9 | 525.2 | 61.5 | 463.7 | 31.0 |
| 2010 | 883.3 | 300.8 | 582.5 | 63.4 | 519.1 | 29.4 |
| 2011 | 920.9 | 304.0 | 616.9 | 66.6 | 550.3 | 30.9 |
| 2012 | 967.7 | 317.6 | 650.1 | 68.0 | 582.2 | 31.0 |
| 2013 | 1,016.1 | 337.8 | 678.3 | 68.9 | 609.4 | 28.8 |
| 2014 | 1,000.8 | 318.5 | 682.3 | 70.4 | 611.9 | 28.2 |
| 2015 | 1,023.6 | 336.7 | 687.0 | 74.6 | 612.3 | 26.6 |
| 2016 | 1,059.6 | 365.8 | 693.8 | 77.8 | 616.0 | 25.6 |
| 2017 | 1,097.2 | 382.8 | 714.5 | 82.6 | 631.9 | 24.1 |

Reference Table II

**Government of Canada Outstanding Market Debt, as at March 31**

$ billions

| | Payable in Canadian dollars | | | | |
|---|---|---|---|---|---|
| **Year** | **Treasury bills** | **Marketable bonds[1]** | **Retail debt** | **Canada Pension Plan bonds** | **Total** |
| 1986 | 62.0 | 81.1 | 44.2 | 0.4 | 187.7 |
| 1987 | 77.0 | 94.4 | 44.3 | 1.8 | 217.5 |
| 1988 | 81.1 | 103.9 | 53.3 | 2.5 | 240.8 |
| 1989 | 102.7 | 115.7 | 47.8 | 3.0 | 269.2 |
| 1990 | 118.6 | 127.7 | 40.9 | 3.1 | 290.2 |
| 1991 | 139.2 | 143.6 | 34.4 | 3.5 | 320.7 |
| 1992 | 152.3 | 158.1 | 35.6 | 3.5 | 349.5 |
| 1993 | 162.1 | 178.5 | 34.4 | 3.5 | 378.4 |
| 1994 | 166.0 | 203.4 | 31.3 | 3.5 | 404.3 |
| 1995 | 164.5 | 225.7 | 31.4 | 3.5 | 425.1 |
| 1996 | 166.1 | 252.8 | 31.4 | 3.5 | 453.8 |
| 1997 | 135.4 | 282.6 | 33.5 | 3.5 | 454.9 |
| 1998 | 112.3 | 294.6 | 30.5 | 3.5 | 440.8 |
| 1999 | 97.0 | 295.8 | 28.2 | 4.1 | 425.0 |
| 2000 | 99.9 | 294.4 | 26.9 | 3.6 | 424.7 |
| 2001 | 88.7 | 295.5 | 26.4 | 3.5 | 414.1 |
| 2002 | 94.2 | 294.9 | 24.0 | 3.4 | 416.5 |
| 2003 | 104.6 | 289.2 | 22.6 | 3.4 | 419.8 |
| 2004 | 113.4 | 279.0 | 21.3 | 3.4 | 417.1 |
| 2005 | 127.2 | 266.7 | 19.1 | 3.4 | 416.3 |
| 2006 | 131.6 | 261.9 | 17.3 | 3.1 | 413.9 |
| 2007 | 134.1 | 257.9 | 15.2 | 1.7 | 408.9 |
| 2008 | 117.0 | 253.8 | 13.1 | 1.0 | 384.9 |
| 2009 | 192.5 | 295.3 | 12.5 | 0.5 | 500.8 |
| 2010 | 175.9 | 367.9 | 11.8 | 0.5 | 556.1 |
| 2011 | 163.0 | 416.1 | 10.1 | 0.0 | 589.2 |
| 2012 | 163.2 | 448.1 | 8.9 | 0.0 | 620.3 |
| 2013 | 180.7 | 469.0 | 7.5 | 0.0 | 657.2 |
| 2014 | 153.0 | 473.3 | 6.3 | 0.0 | 632.6 |
| 2015 | 135.7 | 487.9 | 5.7 | 0.0 | 629.2 |
| 2016 | 138.1 | 504.1 | 5.1 | 0.0 | 647.2 |
| 2017 | 136.7 | 536.3 | 4.5 | 0.0 | 677.5 |

[1] Inflation adjusted.

Reference Table II

**Government of Canada Outstanding Market Debt, as at March 31**

$ billions

| | Payable in foreign currencies | | | | | | |
|---|---|---|---|---|---|---|---|
| Year | Canada bills | Marketable bonds | Canada notes | Euro medium-term notes | Standby drawings | Term loans | Total |
| 1986 | 0.0 | 9.3 | 0.0 | 0.0 | 2.2 | 2.2 | 13.8 |
| 1987 | 1.0 | 8.9 | 0.0 | 0.0 | 0.0 | 2.0 | 12.0 |
| 1988 | 1.0 | 7.9 | 0.0 | 0.0 | 0.0 | 2.3 | 11.3 |
| 1989 | 1.1 | 6.3 | 0.0 | 0.0 | 0.0 | 0.9 | 8.3 |
| 1990 | 1.4 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7 |
| 1991 | 1.0 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 |
| 1992 | 0.0 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 |
| 1993 | 2.6 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 5.4 |
| 1994 | 5.6 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 |
| 1995 | 9.0 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 16.9 |
| 1996 | 7.0 | 9.5 | 0.3 | 0.0 | 0.0 | 0.0 | 16.8 |
| 1997 | 8.4 | 12.5 | 2.1 | 0.0 | 0.0 | 0.0 | 23.0 |
| 1998 | 9.4 | 14.6 | 1.7 | 1.5 | 0.0 | 0.0 | 27.2 |
| 1999 | 10.2 | 19.7 | 1.3 | 4.9 | 0.0 | 0.0 | 36.0 |
| 2000 | 6.0 | 21.4 | 1.1 | 4.1 | 0.0 | 0.0 | 32.6 |
| 2001 | 7.2 | 21.2 | 1.6 | 3.7 | 0.0 | 0.0 | 33.7 |
| 2002 | 3.4 | 19.8 | 1.2 | 3.2 | 0.0 | 0.0 | 27.5 |
| 2003 | 2.6 | 14.5 | 1.2 | 3.3 | 0.0 | 0.0 | 21.6 |
| 2004 | 3.4 | 13.2 | 1.3 | 3.0 | 0.0 | 0.0 | 20.8 |
| 2005 | 3.9 | 9.9 | 1.1 | 1.7 | 0.0 | 0.0 | 16.5 |
| 2006 | 4.7 | 7.6 | 0.5 | 1.5 | 0.0 | 0.0 | 14.3 |
| 2007 | 1.8 | 6.7 | 0.5 | 1.6 | 0.0 | 0.0 | 10.6 |
| 2008 | 1.5 | 6.1 | 0.5 | 1.6 | 0.0 | 0.0 | 9.7 |
| 2009 | 8.7 | 0.3 | 0.0 | 1.7 | 0.0 | 0.0 | 10.6 |
| 2010 | 2.5 | 5.8 | 0.0 | 0.0 | 0.0 | 0.0 | 8.2 |
| 2011 | 2.0 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7 |
| 2012 | 2.1 | 8.6 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 |
| 2013 | 2.1 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 10.8 |
| 2014 | 2.3 | 13.0 | 0.6 | 0.1 | 0.0 | 0.0 | 16.0 |
| 2015 | 3.8 | 14.8 | 1.2 | 0.5 | 0.0 | 0.0 | 20.3 |
| 2016 | 4.7 | 15.3 | 0.7 | 1.2 | 0.0 | 0.0 | 22.5 |
| 2017 | 3.5 | 11.5 | 1.5 | 1.1 | 0.0 | 0.0 | 17.6 |

Reference Table II

## Government of Canada Outstanding Market Debt, as at March 31

$ billions

| | Total market debt | | | | |
|---|---|---|---|---|---|
| Year | Total payable in Canadian dollars | Total payable in foreign currencies | Less: Government's holdings and consolidation adjustment[1] | Total market debt | Average interest rate (%) |
| 1986 | 187.7 | 13.8 | -0.3 | 201.2 | 10.7 |
| 1987 | 217.5 | 12.0 | -0.9 | 228.6 | 9.3 |
| 1988 | 240.8 | 11.3 | -1.2 | 250.8 | 9.6 |
| 1989 | 269.2 | 8.3 | -1.2 | 276.3 | 10.8 |
| 1990 | 290.2 | 5.7 | -1.3 | 294.6 | 11.2 |
| 1991 | 320.7 | 4.5 | -1.3 | 323.9 | 10.7 |
| 1992 | 349.5 | 3.4 | -1.0 | 351.8 | 8.9 |
| 1993 | 378.4 | 5.4 | -1.1 | 382.7 | 7.9 |
| 1994 | 404.3 | 10.7 | -1.0 | 414.0 | 6.8 |
| 1995 | 425.1 | 16.9 | -1.0 | 441.0 | 8.0 |
| 1996 | 453.8 | 16.8 | -1.0 | 469.5 | 7.3 |
| 1997 | 454.9 | 23.0 | -1.1 | 476.8 | 6.7 |
| 1998 | 440.8 | 27.2 | -1.2 | 466.8 | 6.6 |
| 1999 | 425.0 | 36.0 | -3.3 | 457.7 | 6.7 |
| 2000 | 424.7 | 32.6 | -3.1 | 454.2 | 6.2 |
| 2001 | 414.1 | 33.7 | -2.9 | 444.9 | 6.1 |
| 2002 | 416.5 | 27.5 | -3.1 | 440.9 | 5.6 |
| 2003 | 419.8 | 21.6 | -2.7 | 438.6 | 5.3 |
| 2004 | 417.1 | 20.8 | -1.5 | 436.4 | 4.9 |
| 2005 | 416.3 | 16.5 | -1.1 | 431.7 | 4.6 |
| 2006 | 413.9 | 14.3 | -1.0 | 427.2 | 4.7 |
| 2007 | 408.9 | 10.6 | -0.7 | 418.9 | 4.9 |
| 2008 | 384.9 | 9.7 | -0.5 | 394.1 | 4.6 |
| 2009 | 500.8 | 10.6 | -0.6 | 510.8 | 3.2 |
| 2010 | 556.1 | 8.2 | -0.1 | 564.2 | 2.7 |
| 2011 | 589.2 | 7.7 | -0.1 | 596.8 | 2.8 |
| 2012 | 620.3 | 10.7 | -0.1 | 631.0 | 2.7 |
| 2013 | 657.2 | 10.8 | -0.0 | 668.0 | 2.5 |
| 2014 | 632.6 | 16.0 | -0.3 | 648.7 | 2.4 |
| 2015 | 629.2 | 20.3 | -0.4 | 649.5 | 2.3 |
| 2016 | 647.2 | 22.5 | -0.1 | 669.7 | 2.0 |
| 2017 | 677.5 | 17.6 | -0.4 | 695.1 | 1.9 |

[1] Because certain comparative figures have been restated to reflect the presentation method used in recent years, the numbers presented in this reference table can differ from numbers presented in other sections of the *Debt Management Report*. In the reference table, ''Government's holdings and consolidation adjustment'' is presented separately but in the rest of the report the amount is incorporated into the figures. For more information, please consult table 6.2 and table 6.3 of the *Public Accounts of Canada 2017*.

Reference Table III

**Issuance of Government of Canada Domestic Bonds**

$ billions

| | Gross issuance | | | | | | | | Buybacks | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nominal[1] | | | | | | Real Return Bonds | | | | | |
| Fiscal year | 2-year | 3-year | 5-year | 10-year | 30-year | Total | 30-year | Total | Cash | Switch | Total | Net issuance |
| 1995–96 | 11.1 | 5.1 | 17.0 | 10.5 | 5.0 | 48.7 | 1.0 | 49.7 | | | 0.0 | 49.7 |
| 1996–97 | 12.0 | 11.1 | 13.3 | 11.8 | 5.8 | 54.0 | 1.7 | 55.7 | | | 0.0 | 55.7 |
| 1997–98 | 14.0 | | 9.9 | 9.3 | 5.0 | 38.2 | 1.7 | 39.9 | | | 0.0 | 39.9 |
| 1998–99 | 14.0 | | 9.8 | 9.2 | 3.3 | 36.3 | 1.6 | 37.9 | | | 0.0 | 37.9 |
| 1999–00 | 14.2 | | 14.0 | 12.9 | 3.7 | 44.8 | 1.3 | 46.0 | -2.7 | 0.0 | -2.7 | 43.3 |
| 2000–01 | 14.1 | | 10.5 | 10.1 | 3.8 | 38.5 | 1.4 | 39.9 | -2.8 | 0.0 | -2.8 | 37.1 |
| 2001–02 | 14.0 | | 10.0 | 9.9 | 6.3 | 40.2 | 1.4 | 41.6 | -5.3 | -0.4 | -5.6 | 35.9 |
| 2002–03 | 13.9 | | 11.0 | 12.6 | 4.8 | 42.3 | 1.4 | 43.7 | -7.1 | -5.0 | -12.1 | 31.6 |
| 2003–04 | 13.0 | | 10.7 | 11.5 | 4.2 | 39.4 | 1.4 | 40.8 | -5.2 | -5.0 | -10.2 | 30.7 |
| 2004–05 | 12.0 | | 9.6 | 10.6 | 3.3 | 35.5 | 1.4 | 36.9 | -6.8 | -4.7 | -11.4 | 25.5 |
| 2005–06 | 10.0 | | 9.2 | 10.0 | 3.2 | 32.4 | 1.5 | 33.9 | -5.3 | -3.3 | -8.6 | 25.3 |
| 2006–07 | 10.3 | | 7.8 | 10.4 | 3.3 | 31.8 | 1.6 | 33.4 | -5.1 | -4.7 | -9.8 | 23.5 |
| 2007–08 | 11.7 | | 6.3 | 10.7 | 3.4 | 32.0 | 2.3 | 34.3 | -4.3 | -2.4 | -6.7 | 27.6 |
| 2008–09 | 23.2 | | 29.0 | 15.7 | 5.1 | 72.9 | 2.1 | 75.0 | -3.2 | -2.7 | -6.0 | 69.0 |
| 2009–10 | 31.5 | 20.1 | 24.0 | 17.4 | 7.0 | 100.0 | 2.2 | 102.2 | 0.0 | -2.1 | -2.1 | 100.1 |
| 2010–11 | 36.3 | 18.8 | 21.2 | 12.0 | 5.0 | 93.3 | 2.2 | 95.5 | 0.0 | -4.4 | -4.4 | 91.2 |
| 2011–12 | 44.0 | 18.0 | 21.0 | 10.0 | 4.7 | 97.7 | 2.2 | 99.9 | -3.0 | -3.0 | -5.9 | 94.0 |
| 2012–13 | 35.9 | 13.9 | 20.4 | 16.5 | 6.7 | 93.4 | 2.2 | 95.6 | -0.4 | -1.1 | -1.5 | 94.1 |
| 2013–14 | 32.4 | 13.5 | 20.4 | 14.0 | 5.0 | 85.3 | 2.2 | 87.5 | 0.0 | -1.0 | -1.0 | 86.5 |
| 2014–15 | 38.4 | 16.2 | 20.4 | 13.3 | 4.6 | 92.9 | 2.2 | 95.1 | 0.0 | -0.5 | -0.5 | 94.6 |
| 2015–16 | 50.2 | | 26.8 | 10.0 | 3.2 | 90.2 | 2.2 | 92.4 | 0.0 | -0.4 | -0.4 | 92.0 |
| 2016–17 | 62.4 | 19.5 | 30.0 | 15.0 | 4.3 | 131.2 | 2.2 | 133.4 | 0.0 | -0.8 | -0.8 | 132.6 |

1 Including nominal issuance through switch buyback operations.

Source: Bank of Canada.

Reference Table IV

**Outstanding Government of Canada Domestic Bonds, as at March 31, 2017**

Fixed-coupon bonds

| Maturity date | Amount ($ millions) | Coupon rate (%) |
|---|---|---|
| 1-May-2017 | 7,940 | 0.25 |
| 1-Jun-2017 | 7,995 | 4.00 |
| 1-Aug-2017 | 10,119 | 1.25 |
| 1-Sep-2017 | 7,968 | 1.50 |
| 1-Nov-2017 | 10,162 | 0.25 |
| 1-Feb-2018 | 14,662 | 1.25 |
| 1-Mar-2018 | 9,284 | 1.25 |
| 1-May-2018 | 13,910 | 0.25 |
| 1-Jun-2018 | 10,523 | 4.25 |
| 1-Aug-2018 | 15,325 | 0.50 |
| 1-Sep-2018 | 10,200 | 1.25 |
| 1-Nov-2018 | 15,600 | 0.50 |
| 1-Feb-2019 | 15,600 | 0.50 |
| 1-Mar-2019 | 10,200 | 1.75 |
| 1-May-2019 | 11,700 | 0.75 |
| 1-Jun-2019 | 17,650 | 3.75 |
| 1-Sep-2019 | 16,700 | 1.75 |
| 1-Mar-2020 | 23,200 | 1.50 |
| 1-Jun-2020 | 13,100 | 3.50 |
| 1-Sep-2020 | 13,000 | 0.75 |
| 1-Mar-2021 | 13,800 | 0.75 |
| 15-Mar-2021 | 567 | 10.50 |
| 1-Jun-2021 | 11,500 | 3.25 |
| 1-Jun-2021 | 286 | 9.75 |
| 1-Sep-2021 | 15,000 | 0.75 |
| 1-Mar-2022 | 15,000 | 0.50 |
| 1-Jun-2022 | 12,700 | 2.75 |
| 1-Jun-2022 | 206 | 9.25 |
| 1-Jun-2023 | 14,200 | 1.50 |
| 1-Jun-2023 | 2,359 | 8.00 |
| 1-Jun-2024 | 13,800 | 2.50 |
| 1-Jun-2025 | 13,100 | 2.25 |
| 1-Jun-2025 | 2,303 | 9.00 |
| 1-Jun-2026 | 13,500 | 1.50 |
| 1-Jun-2027 | 9,000 | 1.00 |
| 1-Jun-2027 | 4,036 | 8.00 |
| 1-Jun-2029 | 10,903 | 5.75 |
| 1-Jun-2033 | 12,433 | 5.75 |
| 1-Jun-2037 | 13,260 | 5.00 |
| 1-Jun-2041 | 15,361 | 4.00 |
| 1-Dec-2045 | 16,400 | 3.50 |
| 1-Dec-2048 | 12,100 | 2.75 |
| 1-Dec-2064 | 3,500 | 2.75 |
| 1-Dec-2064 | 3,500 | 2.75 |
| **Fixed-coupon bonds—total** | **480,152** | |

## Real Return Bonds

| Maturity date | Amount ($ millions) | Coupon rate (%) | Inflation adjustment ($ millions) | Outstanding amount ($ millions) |
|---|---|---|---|---|
| 1-Dec-2021 | 5,175 | 4.25 | 2,890 | 8,065 |
| 1-Dec-2026 | 5,250 | 4.25 | 2,489 | 7,739 |
| 1-Dec-2031 | 5,800 | 4.00 | 2,417 | 8,217 |
| 1-Dec-2036 | 5,850 | 3.00 | 1,504 | 7,354 |
| 1-Dec-2041 | 6,550 | 2.00 | 1,075 | 7,625 |
| 1-Dec-2044 | 7,700 | 1.50 | 924 | 8,624 |
| 1-Dec-2047 | 7,700 | 1.25 | 386 | 8,086 |
| **Real Return Bonds—total** | **44,025** | | **11,685** | **55,710** |

Note: Outstanding bond amounts reported in this table are in accordance with Bank of Canada reports, which may vary slightly with Government of Canada amounts due to differences in classification methods.

Source: Bank of Canada.

Reference Table V

### Government of Canada Cross-Currency Swaps Outstanding, as at March 31, 2017

CAD$ millions

| | Swaps of domestic obligations | | | | Swaps of foreign obligations | |
|---|---|---|---|---|---|---|
| **Maturity date** | **USD** | **EUR** | **JPY** | **GBP** | **USD** | **Total** |
| 2017 | 3,127 | 1,426 | 0 | 0 | | 4,553 |
| 2018 | 5,253 | 1,845 | 120 | 0 | | 7,217 |
| 2019 | 2,148 | 922 | 624 | 1,614 | | 5,307 |
| 2020 | 7,422 | 1,056 | 0 | 550 | | 9,027 |
| 2021 | 4,620 | 5,214 | 0 | 0 | | 9,835 |
| 2022 | 5,542 | 468 | 562 | 0 | | 6,572 |
| 2023 | 8,933 | 497 | 0 | 142 | | 9,572 |
| 2024 | 5,646 | 1,837 | 0 | 217 | | 7,700 |
| 2025 | 3,491 | 270 | 0 | 3,989 | | 7,749 |
| 2026 | 7,155 | 390 | 0 | 525 | | 8,070 |
| 2027 | 399 | 1,135 | 0 | 2,349 | | 3,883 |
| Total | 53,736 | 15,060 | 1,305 | 9,385 | | 79,486 |

Notes: Foreign currency swaps converted to Canadian dollars using Bank of Canada closing exchange rates as of March 31, 2017. Table does not include $2,256 million in foreign exchange swaps and $1,440 million in foreign exchange forwards that were outstanding as at March 31, 2017. Numbers may not add due to rounding.

Source: Department of Finance Canada.

Reference Table VI

## Crown Corporation Borrowings, as at March 31

$ millions

| Borrowings from the market | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| Export Development Canada | 16,743 | 26,925 | 23,001 | 22,033 | 24,141 | 26,613 | 36,393 | 41,985 | 46,687 | 49,226 |
| Business Development Bank of Canada | 8,025 | 2,354 | 1,488 | 897 | 658 | 648 | 507 | 305 | 253 | 163 |
| Farm Credit Canada | 9,624 | 3,949 | 1,765 | 1,293 | 913 | 691 | 615 | 669 | 762 | 815 |
| Canada Mortgage and Housing Corporation | 8,907 | 6,153 | 4,421 | 3,039 | 2,221 | 1,870 | 1,465 | 1,429 | 282 | 0 |
| Canada Housing Trust[1] | 127,566 | 160,664 | 180,440 | 199,238 | 213,251 | 212,639 | 205,113 | 207,544 | 217,392 | 225,306 |
| Canada Post Corporation | 58 | 93 | 90 | 1,051 | 1,051 | 1,051 | 1,051 | 1,051 | 997 | 997 |
| Other | 119 | 279 | 248 | 204 | 106 | 106 | 128 | 137 | 109 | 52 |
| Total | 171,042 | 200,417 | 211,453 | 227,755 | 242,341 | 243,617 | 245,272 | 253,120 | 266,482 | 276,559 |

1 Canada Housing Trust has been included in the government reporting entity effective April 1, 2005 as a result of the application of a new accounting standard.

## Government's Loans and Advances to Enterprise Crown Corporations

$ millions

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| Business Development Bank of Canada | 1,000 | 7,284 | 12,245 | 13,223 | 12,561 | 13,214 | 14,320 | 15,676 | 16,942 | 18,811 |
| Canada Mortgage and Housing Corporation[1] | 4,393 | 61,863 | 72,262 | 69,569 | 66,595 | 63,123 | 21,173 | 10,708 | 10,531 | 9,811 |
| Farm Credit Canada | 3,840 | 11,450 | 15,931 | 17,558 | 19,326 | 21,174 | 22,029 | 22,691 | 23,438 | 25,684 |
| Other | 134 | 139 | 132 | 122 | 92 | 90 | 149 | 333 | 340 | 455 |
| Total | **9,367** | **80,736** | **100,570** | **100,472** | **98,574** | **97,602** | **57,670** | **49,408** | **51,251** | **54,761** |

1 Includes outstanding lending related to the Insured Mortgage Purchase Program for 2009 to 2014.

Source: *Public Accounts of Canada*.